TEST REPORT

Reference No......	:	WTF24X12289844W003
FCC ID.....	:	2BH83-STAR
Applicant.....	:	FULL TECHNOLOGY TRADE LIMITED
Address.....	:	RM 13,UNIT A1,2/F.,PHASE 1,KAISER ESTATE,NO.41 MAN YUE STREET,HUNGHOM,KLN HONG KONG, China
Manufacturer.....	:	The same as Applicant
Address.....	:	The same as Applicant
Product Name.....	:	Mobile Phone
Model No......	:	STAR
Standards.....	:	FCC Part 15.407
Date of Receipt sample.....	:	2024-12-09
Date of Test.....	:	2024-12-09 to 2025-01-06
Date of Issue.....	:	2025-01-06
Test Report Form No......	:	WTX_Part 15_407W
Test Result.....	:	**Pass**

Remarks:
The results shown in this test report refer only to the sample(s) tested, this test report cannot be reproduced, except in full, without prior written permission of the company. The report would be invalid without specific stamp of test institute and the signatures of approver.

Prepared By:
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Report version

Version No.	Date of issue	Description
Rev.00	2025-01-06	Original
/	/	/

1. GENERAL INFORMATION

1.1 Product Description for Equipment Under Test (EUT)

General Description of EUT	
Product Name:	Mobile Phone
Trade Name:	Lifephone
Model No.:	STAR
Adding Model(s):	/
Rated Voltage:	DC3.85V
Battery Capacity:	4900mAh
Power Adapter:	805A-022A-1A Input:AC100-240V 50/60Hz 0.5A Output:DC5V3A/9V2A/12V1.5A/10V2.25A
Note: The test data is gathered from a production sample, provided by the manufacturer.	

Technical Characteristics of EUT	
Support Standards:	802.11a, 802.11n(HT20), 802.11n-HT40, 802.11ac-VHT20, 802.11ac-VHT40,802.11ac-VHT80
Frequency Range:	5180-5240MHz, 5260-5320MHz 5500-5700MHz, 5745-5825MHz
Max. RF Output Power:	16.35dBm (Conducted)
Type of Modulation:	QPSK, 16QAM, 64QAM
Type of Antenna:	Integral Antenna
Antenna Gain:	-0.78dBi
Note The Antenna Gain is provided by the customer and can affect the validity of results.	

1.2 Test Standards

The tests were performed according to following standards:

FCC Rules Part 15.407: General technical requirements.
ANSI C63.10-2013: American National Standard for Testing Unlicensed Wireless Devices.
KDB789033 D02 v02r01: Guidelines for Compliance Testing of Unlicensed National Information Infrastructure (U-Nii) Devices Part 15, Subparte.

Maintenance of compliance is the responsibility of the manufacturer. Any modification of the product, which result in lowering the emission, should be checked to ensure compliance has been maintained.

1.3 Test Methodology

All measurements contained in this report were conducted with ANSI C63.10-2013, KDB789033 D02 v02r01
The equipment under test (EUT) was configured to measure its highest possible emission level. The test modes were adapted accordingly in reference to the Operating Instructions.

1.4 Table for parameters of Test Software setting

Enter *#*#3646633#*#* into the calculator to enter the engineer mode, you can start to test. During testing, Channel and Power Controlling Software provided by the customer was used to control the operating channel as well as the output power level. The RF output power selection is for the setting of RF output power expected by the customer and is going to be fixed on the firmware of the final end product.

Mode	Test Frequency (MHz)												
	NCB: 20MHz												
	5180	5200	5240	5260	5300	5320	5500	5580	5700	5720	5745	5785	5825
802.11a 6Mbps	16	16	16	15	15	15	14	14	14	14	15	15	15
802.11n-HT20 MCS0	15	15	15	14	14	14	13	13	13	13	14	14	14
802.11ac-VHT20 MCS0	15	15	15	14	14	14	13	13	13	13	14	14	14

Mode	NCB: 40MHz									
	5190	5230	5270	5310	5510	5550	5670	5710	5755	5795
802.11n-HT40 MCS0	14	14	12	12	12	12	12	12	12	12
802.11ac-VHT40 MCS0	14	14	12	12	12	12	12	12	12	12

Mode	NCB: 80MHz					
	5210	5290	5530	5610	5690	5775
802.11ac-VHT80 MCS0	13	12	12	12	12	11

1.5 EUT Operating during test

EUT was programmed to be in continuously transmitting mode. During the test, EUT operation to normal function and programs under Android were executed.

1.6 Test Facility

Address of the test laboratory

Laboratory: Waltek Testing Group (Shenzhen) Co., Ltd.
Address: 1/F., Room 101, Building 1, Hongwei Industrial Park, Liuxian 2nd Road, Block 70 Bao'an District, Shenzhen, Guangdong, China

FCC – Registration No.: 125990

Waltek Testing Group (Shenzhen) Co., Ltd. EMC Laboratory has been registered and fully described in a report filed with the FCC (Federal Communications Commission). The acceptance letter from the FCC is mai ntained in our files. The Designation Number is CN5010, and Test Firm Registration Number is 125990.

Industry Canada (IC) Registration No.: 11464A

The 3m Semi-anechoic chamber of Waltek Testing Group (Shenzhen) Co., Ltd. has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 11464A and the CAB identifier is CN0057.

1.7 EUT Setup and Test Mode

The EUT was operated in the engineering mode to fix the Tx frequency that was for the purpose of the measurements. All testing shall be performed under maximum output power condition, with a duty cycle equal to 100%, and to measure its highest possible emissions level, more detailed description as follows:

Test Mode List		
Test Mode	Description	Remark
TM1	802.11a	5180MHz,5200MHz,5240MHz,5260MHz,5280MHz,5320MHz,5500MHz, 5600MHz,5700MHz,5745MHz, 5785MHz,5825MHz
TM2	802.11n-HT20	5180MHz,5200MHz,5240MHz,5260MHz,5280MHz,5320MHz,5500MHz, 5600MHz,5700MHz,5745MHz, 5785MHz,5825MHz
TM3	802.11ac-VHT20	5180MHz,5200MHz,5240MHz,5260MHz,5280MHz,5320MHz,5500MHz, 5600MHz,5700MHz,5745MHz, 5785MHz,5825MHz
TM4	802.11n-HT40	5190MHz,5230MHz,5270MHz,5310MHz,5510MHz,5590MHz,5670MHz, 5755MHz,5795MHz
TM5	802.11ac-VHT40	5190MHz,5230MHz,5270MHz,5310MHz,5510MHz,5590MHz,5670MHz, 5755MHz,5795MHz
TM6	802.11ac-VHT80	5210MHz,5290MHz,5530MHz,5610MHz,5775MHz

Test Conditions	
Temperature:	22~25 °C
Relative Humidity:	45~75 %
ATM Pressure:	1019 mbar

EUT Cable List and Details			
Cable Description	Length (m)	Shielded/Unshielded	With / Without Ferrite
USB Cable	0.95	Shielded	Without Ferrite

Special Cable List and Details			
Cable Description	Length (m)	Shielded/Unshielded	With / Without Ferrite
Earphone Cable	1.0	Unshielded	Without Ferrite

Auxiliary Equipment List and Details			
Description	Manufacturer	Model	Serial Number
Notebook	Lenovo	TianYi 100-14IBD	PF0F4ABV

1.8 Measurement Uncertainty

Measurement uncertainty		
Parameter	Conditions	Uncertainty
RF Output Power	Conducted	±0.42dB
Occupied Bandwidth	Conducted	±1.5%
Power Spectral Density	Conducted	±1.8dB
Conducted Spurious Emission	Conducted	±2.17dB
Conducted Emissions	Conducted	9-150kHz ±3.74dB
		0.15-30MHz ±3.34dB
Transmitter Spurious Emissions	Radiated	30-200MHz ±4.52dB
		0.2-1GHz ±5.56dB
		1-6GHz ±3.84dB
		6-18GHz ±3.92dB

1.9 Test Equipment List and Details

Fixed asset Number	Description	Manufacturer	Model	Serial No.	Cal Date	Due. Date
WTXE1041A 1001	Communication Tester	Rohde & Schwarz	CMW500	148650	2024-02-24	2025-02-23
WTXE1005A 1005	Spectrum Analyzer	Agilent	N9020A	US47140102	2024-03-19	2025-03-18
WTXE1084A 1001	Spectrum Analyzer	Agilent	N9020A	MY54320548	2024-02-24	2025-02-23
WTXE1004A 1-001	Spectrum Analyzer	Rohde & Schwarz	FSP40	100612	2024-02-27	2025-02-26
WTXE1103A 1003	Attenuator	Pasternack	PE4007-4	/	2024-02-24	2025-02-23
WTXE1003A 1-005	Coaxial Cable	/	0M4RFC	/	2024-07-03	2025-01-03
					2025-01-03	2025-07-02
☐ Chamber A: Below 1GHz						
WTXE1005A 1003	Spectrum Analyzer	Rohde & Schwarz	FSP30	836079/035	2024-02-24	2025-02-23
WTXE1001A 1001	EMI Test Receiver	Rohde & Schwarz	ESPI	101611	2024-03-19	2025-03-18
WTXE1007A 1001	Amplifier	HP	8447F	2805A03475	2024-02-24	2025-02-23
WTXE1010A 1007	Loop Antenna	Schwarz beck	FMZB 1516	9773	2024-02-26	2025-02-25
WTXE1010A 1006	Broadband Antenna	Schwarz beck	VULB9163	9163-333	2024-02-24	2025-02-23
WTXE1104A 1032-1	Coaxial Cable	/	RC_6G-N-M	/	2024-03-15	2025-03-14
WTXE1104A 1032-2	Coaxial Cable	/	RC_6G-N-M	/	2024-03-15	2025-03-14
WTXE1104A 1032-3	Coaxial Cable	/	RC_6G-N-M	/	2024-03-15	2025-03-14
☐ Chamber A: Above 1GHz						
WTXE1005A 1003	Spectrum Analyzer	Rohde & Schwarz	FSP30	836079/035	2024-02-24	2025-02-23
WTXE1001A 1001	EMI Test Receiver	Rohde & Schwarz	ESPI	101611	2024-03-19	2025-03-18
WTXE1065A 1001	Amplifier	C&D	PAP-1G18	2002	2024-02-27	2025-02-26
WTXE1010A 1005	Horn Antenna	ETS	3117	00086197	2024-02-26	2025-02-25

WTXE1010A 1010	DRG Horn Antenna	A.H. SYSTEMS	SAS-574	571	2024-03-17	2025-03-16
WTXE1003A 1001	Pre-amplifier	Schwarzbeck	BBV 9721	9721-031	2024-02-29	2025-02-28
WTXE1104A 1033-1	Coaxial Cable	/	C16-07-07	/	2024-03-15	2025-03-14
WTXE1104A 1033-2	Coaxial Cable	/	C16-07-07	/	2024-03-15	2025-03-14
WTXE1104A 1033-3	Coaxial Cable	/	C16-07-07	/	2024-03-15	2025-03-14
☐ Chamber B:Below 1GHz						
WTXE1010A 1006	Trilog Broadband Antenna	Schwarz beck	VULB9163(B)	9163-635	2024-03-17	2027-03-16
WTXE1038A 1001	Amplifier	Agilent	8447D	2944A104 57	2024-02-24	2025-02-23
WTXE1001A 1002	EMI Test Receiver	Rohde & Schwarz	ESPI	101391	2024-02-24	2025-02-23
WTXE1104A 1031-1	Coaxial Cable	/	1.5MRFC-LWB3	/	2024-07-03	2025-07-02
WTXE1104A 1031-2	Coaxial Cable	/	RG 316	/	2024-07-03	2025-07-02
WTXE1104A 1031-3	Coaxial Cable	/	RG 316	/	2024-07-03	2025-07-02
☒ Chamber C:Below 1GHz						
WTXE1093A 1001	EMI Test Receiver	Rohde & Schwarz	ESIB 26	100401	2024-02-27	2025-02-26
WTXE1010A 1013-1	Trilog Broadband Antenna	Schwarz beck	VULB 9168	1194	2024-04-18	2027-04-17
WTXE1007A 1002	Amplifier	HP	8447F	2944A038 69	2024-02-24	2025-02-23
WTXE1010A 1007	Loop Antenna	Schwarz beck	FMZB 1516	9773	2024-02-26	2025-02-25
WTXE1104A 1034-1	Coaxial Cable	/	RC_6G-N-M	/	2024-07-03	2025-07-02
WTXE1104A 1034-2	Coaxial Cable	/	RC_6G-N-M	/	2024-07-03	2025-07-02
WTXE1104A 1034-3	Coaxial Cable	/	RC_6G-N-M	/	2024-07-03	2025-07-02
☒ Chamber C: Above 1GHz						
WTXE1093A	EMI Test	Rohde &	ESIB 26	100401	2024-02-27	2025-02-26

1001	Receiver	Schwarz				
WTXE1103A 1005	Horn Antenna	POAM	RTF-118A	1820	2023-03-10	2026-03-09
WTXE1103A 1006	Amplifier	Tonscend	TAP01018050	AP22E806 235	2024-02-27	2025-02-26
WTXE1010A 1010	DRG Horn Antenna	A.H. SYSTEMS	SAS-574	571	2024-03-17	2025-03-16
WTXE1003A 1001	Pre-amplifier	Schwarzbeck	BBV 9721	9721-031	2024-02-29	2025-02-28
WTXE1104A 1035-1	Coaxial Cable	/	RC-18G-N-M	/	2024-07-03	2025-07-02
WTXE1104A 1035-2	Coaxial Cable	/	RC-18G-N-M	/	2024-07-03	2025-07-02
WTXE1104A 1035-3	Coaxial Cable	/	RC-18G-N-M	/	2024-07-03	2025-07-02
☐ Conducted Room 1#						
WTXE1104A 1029	EMI Test Receiver	Rohde & Schwarz	ESCI	100525	2024-12-08	2025-12-07
WTXE1002A 1001	Pulse Limiter	Rohde & Schwarz	ESH3-Z2	100911	2024-02-24	2025-02-23
WTXE1003A 1001	AC LISN	Schwarz beck	NSLK8126	8126-279	2024-02-24	2025-02-23
WTXE1104A 1036	Coaxial Cable	/	RG 316	/	2024-07-03	2025-07-02
WTXE1104A 1038	Coaxial Cable	/	6MRFC-DP	/	2024-07-03	2025-07-02
☒ Conducted Room 2#						
WTXE1001A 1004	EMI Test Receiver	Rohde & Schwarz	ESPI	101259	2024-02-24	2025-02-23
WTXE1003A 1003	LISN	Rohde & Schwarz	ENV 216	100097	2024-02-24	2025-02-23
WTXE1104A 1037	Coaxial Cable	/	RG 316	/	2024-07-03	2025-07-02

Software List			
Description	**Manufacturer**	**Model**	**Version**
EMI Test Software (Radiated Emission A)	Farad	EZ-EMC	RA-03A1 (1.1.4.2)
EMI Test Software (Radiated Emission B)	Farad	EZ-EMC	RA-03A1 (1.1.4.2)
EMI Test Software (Radiated Emission C)	Farad	EZ-EMC	RA-03A1-2 (1.1.4.2)
EMI Test Software (Conducted Emission Room 1#)	Farad	EZ-EMC	3A1*CE-RE 1.1.4.3
EMI Test Software (Conducted Emission Room 2#)	Farad	EZ-EMC	3A1*CE-RE 1.1.4.3

*Remark: indicates software version used in the compliance certification testing.

2. SUMMARY OF TEST RESULTS

FCC Rules	Description of Test Item	Result
§15.203; §15.405	Antenna Requirement	Compliant
15.407 (c)	Automatically Discontinue Transmission	Compliant
§15.207; §15.407(b)(6)	Conducted Emission	Compliant
§15.407(a)(1),(2)	Power Spectral Density	Compliant
§15.407(e)	Emission Bandwidth and Occupied Bandwidth	Compliant
§15.407(a)(1),(2)	Maximum Conducted Output Power	Compliant
§15.407(b)(1),(2),(3),(4)	Undesirable emission	Compliant
§15.205; §15.407(b)(1),(2),(3)	Radiated Emission	Compliant
§15.407(g)	Frequency Stability	Compliant
§15.407(h)	Dynamic Frequency Selection (DFS)	Compliant

N/A: Not applicable.

3. Antenna Requirement

3.1 Standard Applicable

According to FCC Part 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section.

3.2 Evaluation Information

This product has an Integral antenna, fulfill the requirement of this section.

4. Automatically Discontinue Transmission

4.1 Standard Applicable

According to FCC Part 15.407(c), the device shall automatically discontinue transmission in case of either absence of information to transmit or operational failure. These provisions are not intended to preclude the transmission of control or signaling information or the use of repetitive codes used by certain digital technologies to complete frame or burst intervals. Applicants shall include in their application for equipment authorization to describe how this requirement is met.

4.2 Summary of Test Results

While the EUT is not transmitting any information, the EUT can automatically discontinue transmission and become standby mode for power saving. The EUT can detect the controlling signal of ACK message transmitting from remote device and verify whether it shall resend or discontinue transmission.

5. Power Spectral Density

5.1 Standard Applicable

Section 15.407(a) Power limits:

(1) For the band 5.15-5.25GHz.
(iv) For mobile and portable client devices in the 5.15-5.25GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250mW provided the maximum antenna gain does not exceed 6dBi. In addition, the maximum power spectral density shall not exceed 11dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

(2) For the 5.25-5.35GHz and 5.47-5.725GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250mW or 11 dBm + 10 log B, where B is the 26dB emission bandwidth in megahertz. In addition, the maximum power spectral density shall not exceed 11dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

(3) For the band 5.725-5.85GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30dBm in any 500kHz band. If transmitting antennas of directional gain greater than 6dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi. However, fixed point-to-point U-NII devices operating in this band may employ transmitting antennas with directional gain greater than 6dBi without any corresponding reduction in transmitter conducted power. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

5.2 Test Procedure

According to 789033 D02 v02r01 General UNII Test Procedures New Rules v02, the following is the measurement procedure.
For devices operating in the bands 5.15-5.25GHz, 5.25-5.35GHz, and 5.47-5.725GHz, the above procedures make use of 1 MHz RBW to satisfy directly the 1 MHz reference bandwidth specified in § 15.407(a)(5). For devices operating in the band 5.725-5.85GHz, the rules specify a measurement bandwidth of 500kHz. Many spectrum analyzers do not have 500kHz RBW, thus a narrower RBW may need to be used. The rules permit the use of a RBWs less than 1 MHz, or 500kHz, “provided that the measured power is integrated over the full

reference bandwidth" to show the total power over the specified measurement bandwidth (i.e., 1MHz, or 500kHz). If measurements are performed using a reduced resolution bandwidth (< 1MHz, or < 500kHz) and integrated over 1 MHz, or 500kHz bandwidth, the following adjustments to the procedures apply:

a) Set RBW ≥ 1/T, where T is defined in section II.B.I.a).
b) Set VBW ≥ 3 RBW.
c) If measurement bandwidth of Maximum PSD is specified in 500kHz, add 10log(500kHz/RBW) to the measured result, whereas RBW (< 500kHz) is the reduced resolution bandwidth of the spectrum analyzer set during measurement.
d) If measurement bandwidth of Maximum PSD is specified in 1 MHz, add 10log(1MHz/RBW) to the measured result, whereas RBW (< 1MHz) is the reduced resolution bandwidth of spectrum analyzer set during measurement.
e) Care must be taken to ensure that the measurements are performed during a period of continuous transmission or are corrected upward for duty cycle.

Note: As a practical matter, it is recommended to use reduced RBW of 100kHz for the sections 5.c) and 5.d) above, since RBW=100kHZ is available on nearly all spectrum analyzers.

5.3 Summary of Test Results/Plots

Please refer to Appendix A

6. Emission Bandwidth and Occupied Bandwidth

6.1 Standard Applicable

According to 15.407(a) and (e):

(1) For the band 5.15-5.25GHz.
(iv) For mobile and portable client devices in the 5.15-5.25GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250mW provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 11dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

(2) For the 5.25-5.35GHz and 5.47-5.725GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250mW or 11dBm + 10 log B, where B is the 26dB emission bandwidth in megahertz. In addition, the maximum power spectral density shall not exceed 11dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

(3) For the band 5.725-5.85GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30dBm in any 500kHz band. If transmitting antennas of directional gain greater than 6dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi. However, fixed point-to-point U-NII devices operating in this band may employ transmitting antennas with directional gain greater than 6dBi without any corresponding reduction in transmitter conducted power. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

(e) Within the 5.725-5.85GHz band, the minimum 6dB bandwidth of U-NII devices shall be at least 500kHz.

6.2 Test Procedure

According to 789033 D02 v02r0r section C&D, the following is the measurement procedure.

1. Emission Bandwidth (EBW)
a) Set RBW = approximately 1% of the emission bandwidth.
b) Set the VBW > RBW.

c) Detector = Peak.
d) Trace mode = max hold.
e) Measure the maximum width of the emission that is 26dB down from the maximum of the emission. Compare this with the RBW setting of the analyzer. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is approximately 1%.

2. Minimum Emission Bandwidth for the band 5.725-5.85GHz Section 15.407(e) specifies the minimum 6 dB emission bandwidth of at least 500KHz for the band 5.715-5.85 GHz. The following procedure shall be used for measuring this bandwidth:
a) Set RBW = 100kHz.
b) Set the video bandwidth (VBW) ≥ 3 × RBW.
c) Detector = Peak.
d) Trace mode = max hold.
e) Sweep = auto couple.
f) Allow the trace to stabilize.
g) Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6dB relative to the maximum level measured in the fundamental emission.
Note: The automatic bandwidth measurement capability of a spectrum analyzer or EMI receiver may be employed if it implements the functionality described above.

D. 99 Percent Occupied Bandwidth
The 99-percent occupied bandwidth is the frequency bandwidth such that, below its lower and above its upper frequency limits, the mean powers are each equal to 0.5 % of the total mean power of the given emission. Measurement of the 99-percent occupied bandwidth is required only as a condition for using the optional band-edge measurement techniques described in section II.G.3.d). Measurements of 99-percent occupied bandwidth may also optionally be used in lieu of the EBW to 789033 D02 v02r01 General UNII Test Procedures New Rules v01 define the minimum frequency range over which the spectrum is integrated when measuring maximum conducted output power as described in section II.E. However, the EBW must be measured to determine bandwidth dependent limits on maximum conducted output power in accordance with 15.407(a).

The following procedure shall be used for measuring (99 %) power bandwidth:
1. Set center frequency to the nominal EUT channel center frequency.
2. Set span = 1.5 times to 5.0 times the OBW.
3. Set RBW = 1 % to 5 % of the OBW
4. Set VBW ≥ 3 * RBW
5. Video averaging is not permitted. Where practical, a sample detection and single sweep mode shall be used. Otherwise, peak detection and max hold mode (until the trace stabilizes) shall be used.
6. Use the 99 % power bandwidth function of the instrument (if available).
7. If the instrument does not have a 99 % power bandwidth function, the trace data points are recovered and directly summed in power units. The recovered amplitude data points, beginning at the lowest frequency, are placed in a running sum until 0.5 % of the total is reached; that frequency is recorded as the lower frequency.

The process is repeated until 99.5 % of the total is reached; that frequency is recorded as the upper frequency. The 99% occupied bandwidth is the difference between these two frequencies.

6.3 Summary of Test Results/Plots

Please refer to Appendix B

7. Maximum Conducted Output Power

7.1 Standard Applicable

Section 15.407(a) Power limits:

(1) For the band 5.15-5.25GHz.
(iv) For mobile and portable client devices in the 5.15-5.25GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250mW provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 11dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

(2) For the 5.25-5.35GHz and 5.47-5.725GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250mW or 11dBm + 10 log B, where B is the 26dB emission bandwidth in megahertz. In addition, the maximum power spectral density shall not exceed 11dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

(3) For the band 5.725-5.85GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30dBm in any 500kHz band. If transmitting antennas of directional gain greater than 6dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi. However, fixed point-to-point U-NII devices operating in this band may employ transmitting antennas with directional gain greater than 6dBi without any corresponding reduction in transmitter conducted power. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

7.2 Test Procedure

According to KDB789033 D02 v02r01 section E, the following is the measurement procedure.

(i) Set span to encompass the entire emission bandwidth (EBW) (or, alternatively, the entire 99% occupied bandwidth) of the signal.

(ii) Set RBW = 1MHz.

(iii) Set VBW ≥ 3MHz.

(iv) Number of points in sweep ≥ 2 Span / RBW. (This ensures that bin-to-bin spacing is ≤ RBW/2, so that

narrowband signals are not lost between frequency bins.)

(v) Sweep time = auto.

(vi) Detector = RMS (i.e., power averaging), if available. Otherwise, use sample detector mode.

(vii) If transmit duty cycle < 98 percent, use a video trigger with the trigger level set to enable triggering only on full power pulses. Transmitter must operate at maximum power control level for the entire duration of every sweep. If the EUT transmits continuously (i.e., with no off intervals) or at duty cycle ≥ 98 percent, and if each transmission is entirely at the maximum power control level, then the trigger shall be set to “free run”.

(viii) Trace average at least 100 traces in power averaging (i.e., RMS) mode.

(ix) Compute power by integrating the spectrum across the EBW (or, alternatively, the entire 99% occupied bandwidth) of the signal using the instrument’s band power measurement function with band limits set equal to the EBW (or occupied bandwidth) band edges. If the instrument does not have a band power function, sum the spectrum levels (in power units) at 1MHz intervals extending across the EBW (or, alternatively, the entire 99% occupied bandwidth) of the spectrum.

7.3 Summary of Test Results/Plots

Please refer to Appendix C

8. Radiated Spurious Emissions

8.1 Standard Applicable

According to §15.407(b), undesirable emission limits. Except as shown in paragraph (b)(7) of this section, the maximum emissions outside of the frequency bands of operation shall be attenuated in accordance with the following limits:

(1) For transmitters operating in the 5.15-5.25GHz band: All emissions outside of the 5.15-5.35GHz band shall not exceed an e.i.r.p. of −27dBm/MHz.

(2) For transmitters operating in the 5.25-5.35GHz band: All emissions outside of the 5.15-5.35GHz band shall not exceed an e.i.r.p. of −27dBm/MHz.

(3) For transmitters operating in the 5.47-5.725GHz band: All emissions outside of the 5.47-5.725GHz band shall not exceed an e.i.r.p. of −27dBm/MHz.

(4) For transmitters operating in the 5.725-5.85GHz band:

(i) All emissions shall be limited to a level of −27dBm/MHz at 75MHz or more above or below the band edge increasing linearly to 10dBm/MHz at 25MHz above or below the band edge, and from 25MHz above or below the band edge increasing linearly to a level of 15.6dBm/MHz at 5MHz above or below the band edge, and from 5MHz above or below the band edge increasing linearly to a level of 27dBm/MHz at the band edge.

According to §15.407(b)(6), Unwanted emissions below 1GHz must comply with the general field strength limits set forth in §15.209. Further, any U-NII devices using an AC power line are required to comply also with the conducted limits set forth in §15.207.

According to §15.407(b)(7), The provisions of §15.205 apply to intentional radiators operating under this section.

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If radiated measurements are performed, field strength is then converted to EIRP as follows:

EIRP = ((E*d)^2) / 30

where:

• E is the field strength in V/m;

• d is the measurement distance in meters;

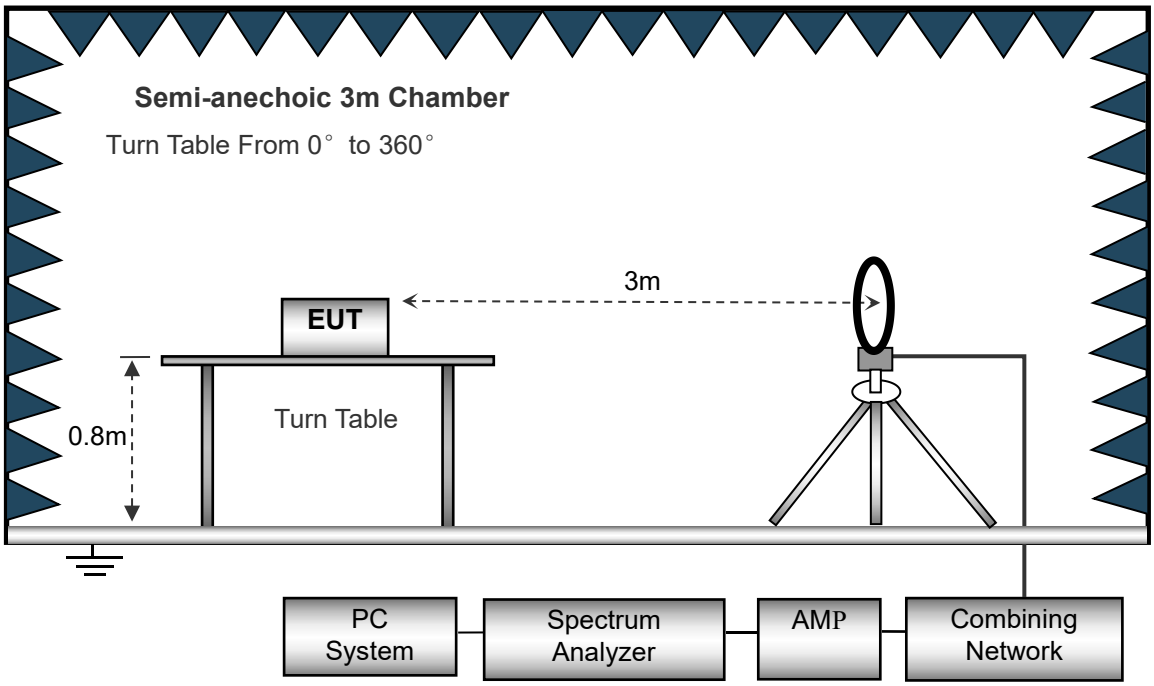
• EIRP is the equivalent isotropically radiated power in watts.

8.2 Test Procedure

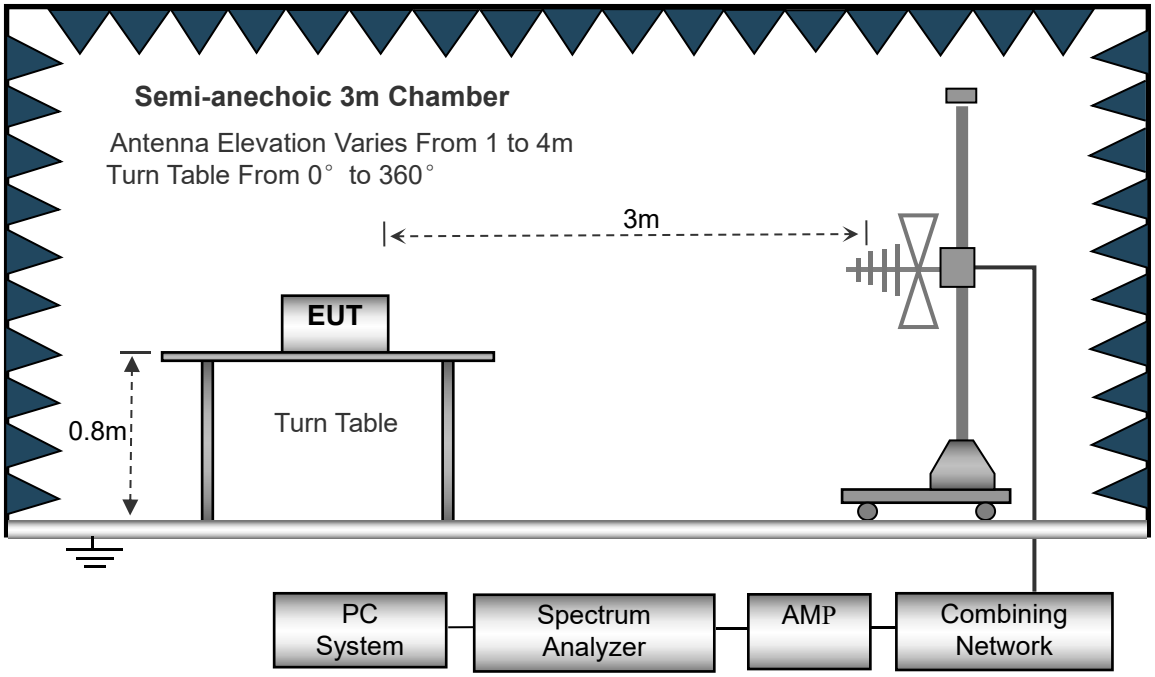
The setup of EUT is according with per ANSI C63.10-2013 measurement procedure. The specification used was with the FCC Part 15.205 15.407(b)(6) and FCC Part 15.209 Limit..

The external I/O cables were draped along the test table and formed a bundle 30 to 40cm long in the middle. The spacing between the peripherals was 10cm.

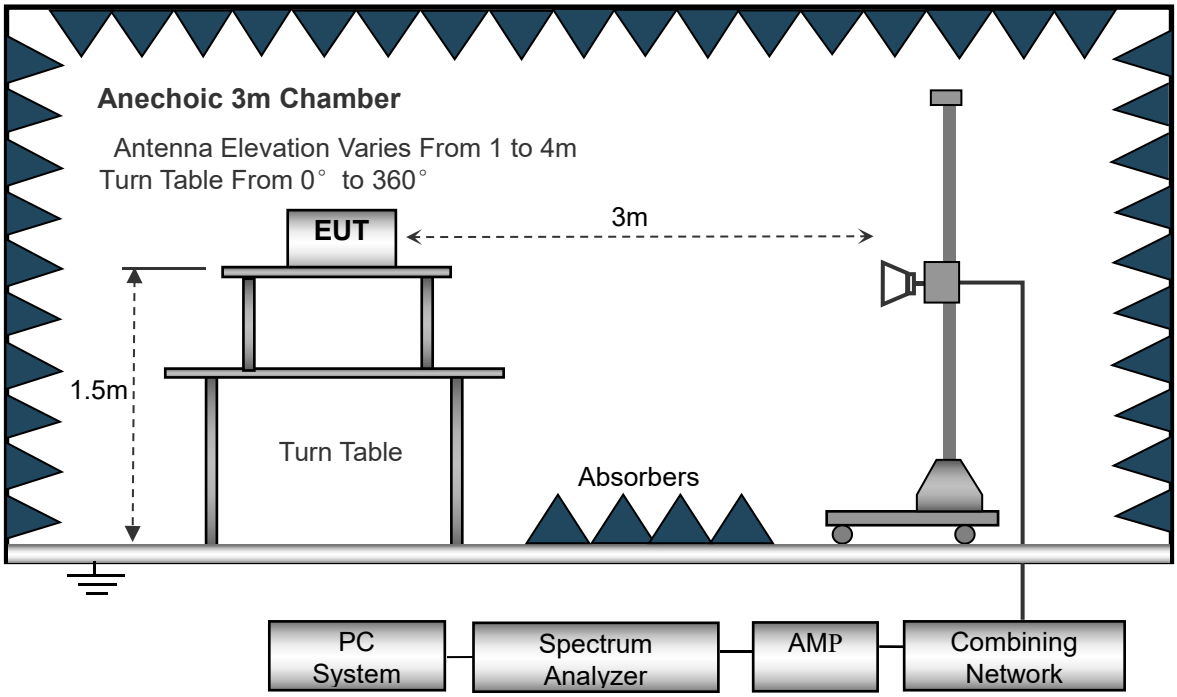
The test setup for emission measurement below 30MHz.



The test setup for emission measurement from 30MHz to 1GHz.



The test setup for emission measurement above 1GHz.



8.3 Test Receiver Setup

During the radiated emission test for above 1GHz, the test receiver was set with the following configurations:

For peak detector:
RBW = 1000kHz, VBW = 3000kHz, Sweep Time = Auto

For average detector:
RBW = 1000kHz, VBW = 10Hz, Sweep Time = Auto

8.4 Corrected Amplitude & Margin Calculation

The Corrected Amplitude is calculated adding the Antenna Factor and the Cable Factor, and subtracting the Amplifier Gain from the Amplitude reading. The basic equation is as follows:

Corr. Ampl. = Indicated Reading + Ant. Factor + Cable Loss – Ampl. Gain

The "**Margin**" column of the following data tables indicates the degree of compliance with the applicable limit. For example, a margin of -6dBμV means the emission is 6dBμV below the maximum limit for Class B. The equation for margin calculation is as follows:

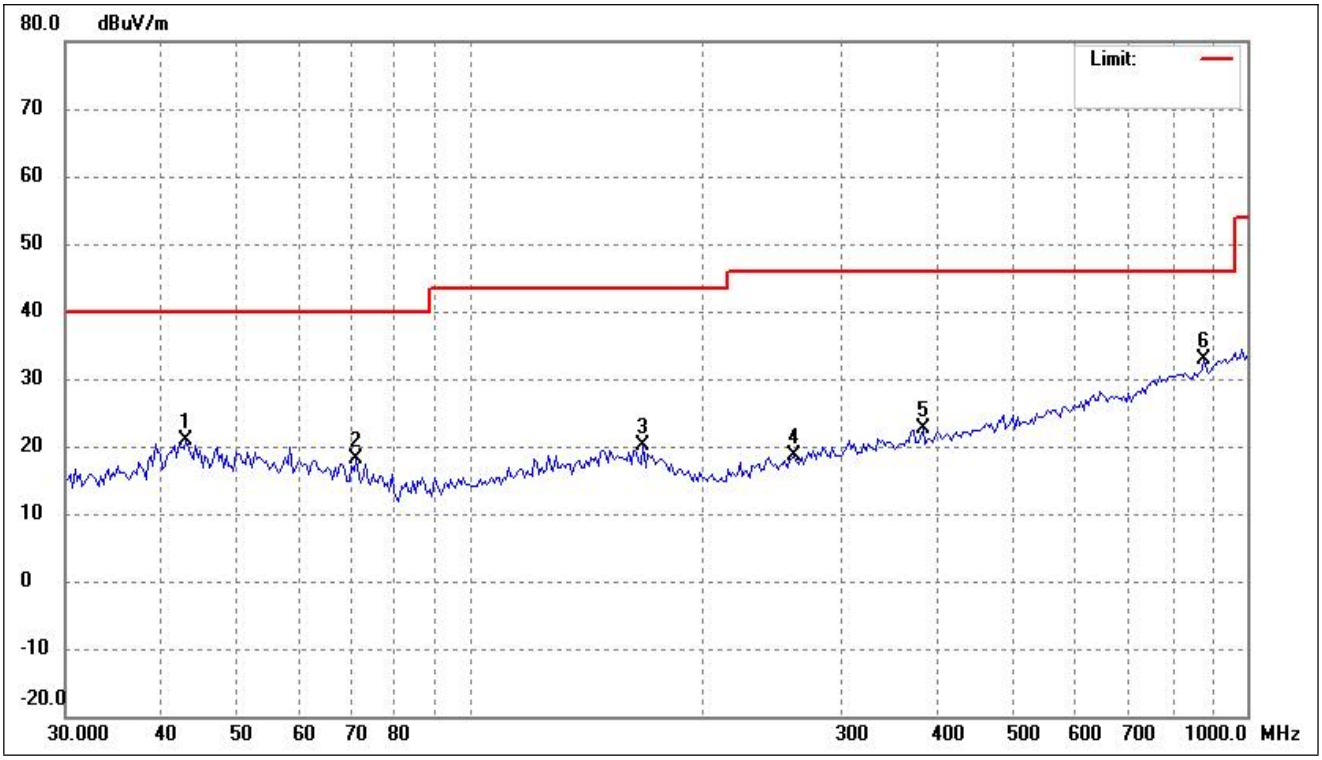
Margin = Corr. Ampl. – FCC Part 15 Limit

8.5 Summary of Test Results/Plots

Note: *this EUT was tested in 3 orthogonal positions and the worst case position data was reported.*

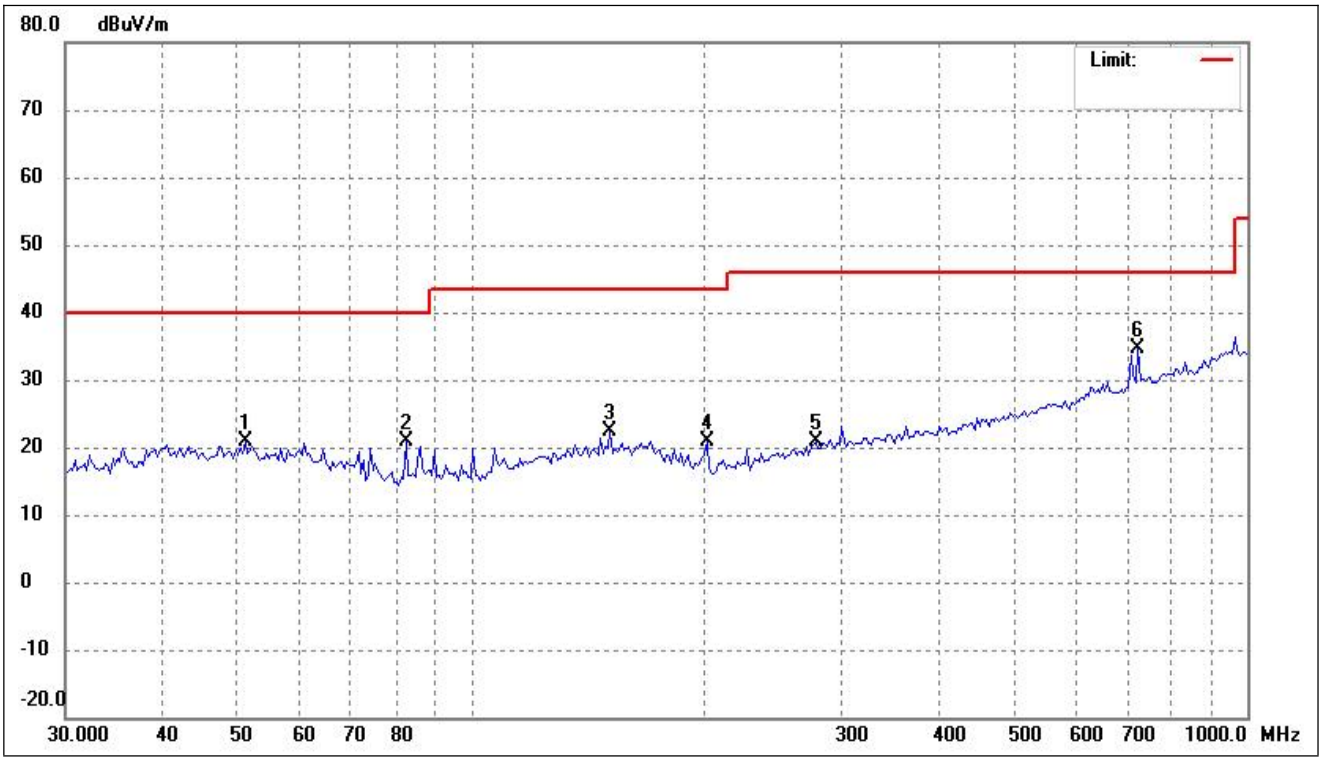
- Spurious Emission From 30MHz to 1GHz
- 5150-5250MHz

802.11a			
Test Channel	5180MHz(Worst case)	Polarity:	Horizontal



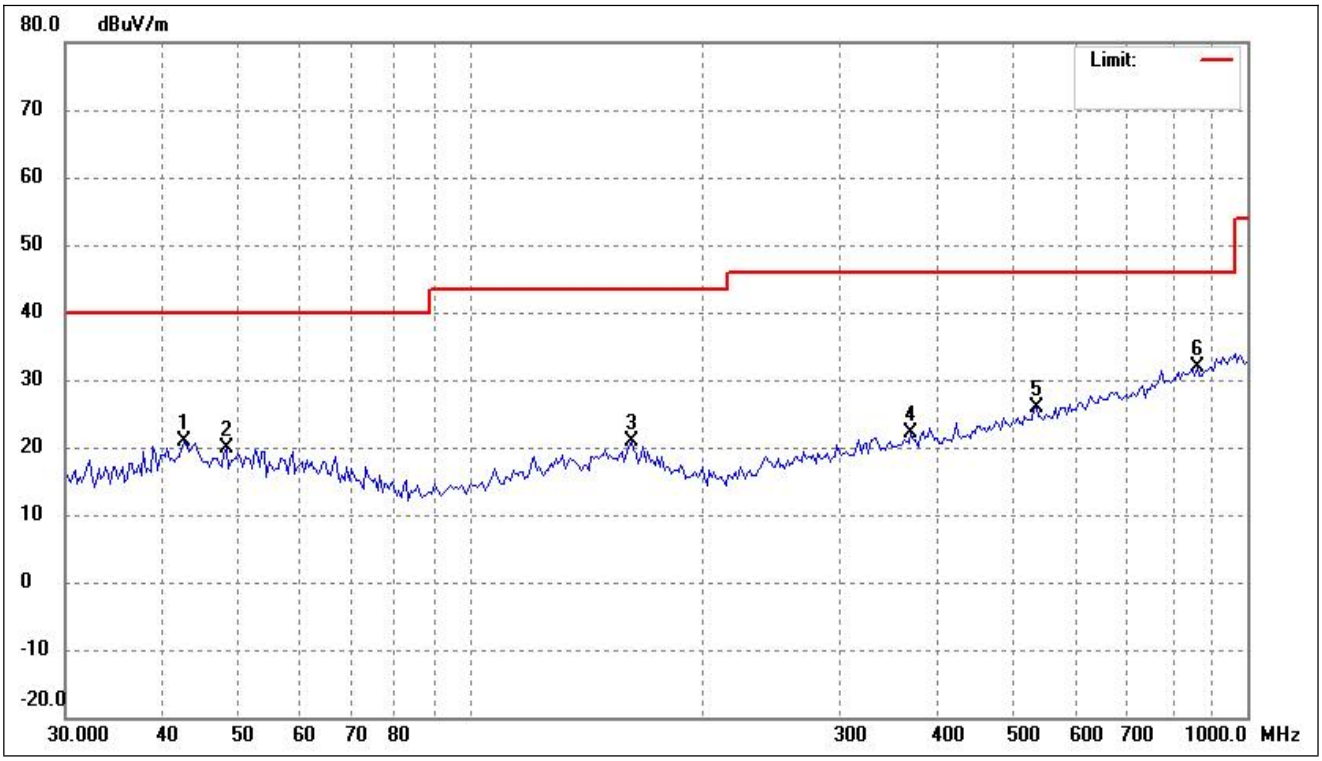
No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	42.9305	28.92	-7.96	20.96	40.00	-19.04	-	-	peak
2	71.2033	28.76	-10.52	18.24	40.00	-21.76	-	-	peak
3	166.6385	28.40	-8.23	20.17	43.50	-23.33	-	-	peak
4	261.2730	27.78	-9.24	18.54	46.00	-27.46	-	-	peak
5	381.8520	29.11	-6.50	22.61	46.00	-23.39			
6	881.1838	30.95	1.88	32.83	46.00	-13.17			

802.11a			
Test Channel	5180MHz(Worst case)	Polarity:	Vertical



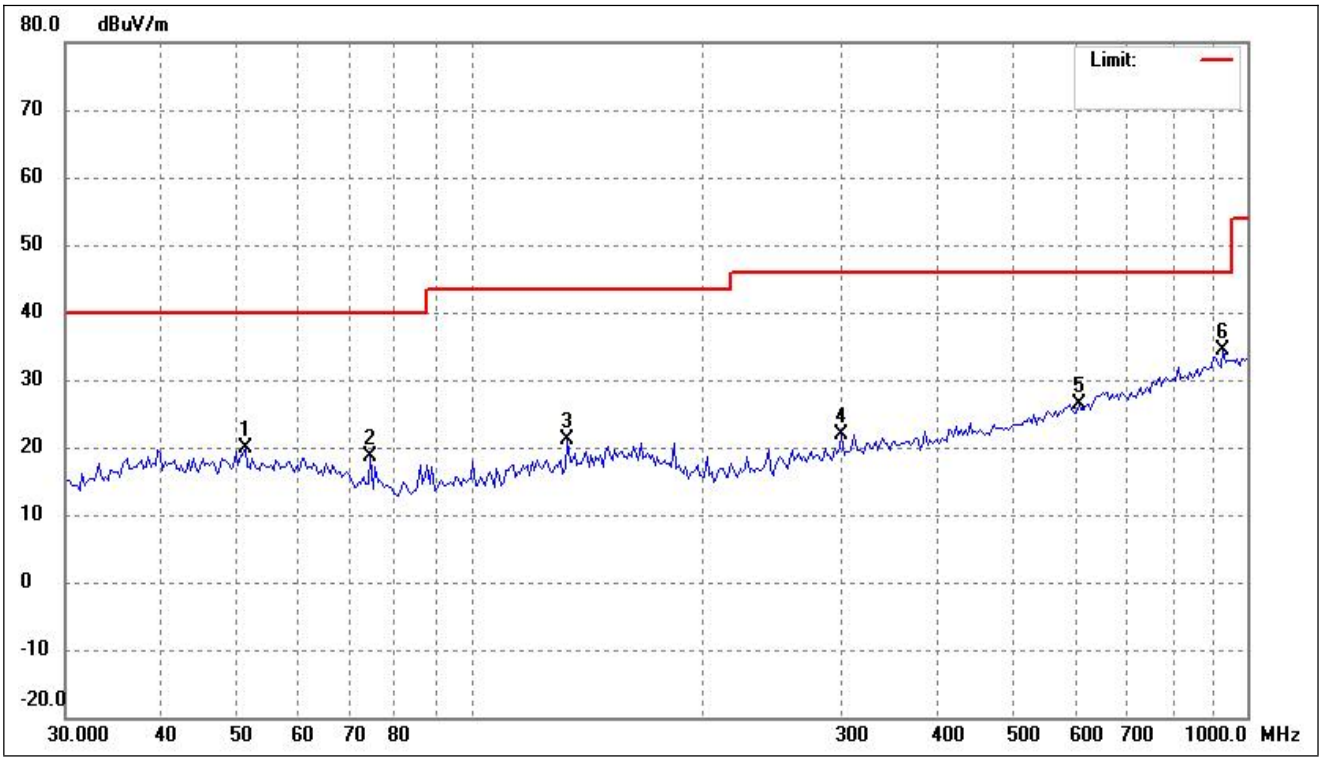
No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	51.1756	28.53	-7.72	20.81	40.00	-19.19	-	-	peak
2	82.5257	33.34	-12.48	20.86	40.00	-19.14	-	-	peak
3	151.0252	30.47	-8.05	22.42	43.50	-21.08	-	-	peak
4	201.4539	32.38	-11.42	20.96	43.50	-22.54	-	-	peak
5	278.3308	29.55	-8.55	21.00	46.00	-25.00	-	-	peak
6	723.7930	35.03	-0.49	34.54	46.00	-11.46	-	-	peak

802.11n-HT20			
Test Channel	5180MHz(worst case)	Polarity:	Horizontal



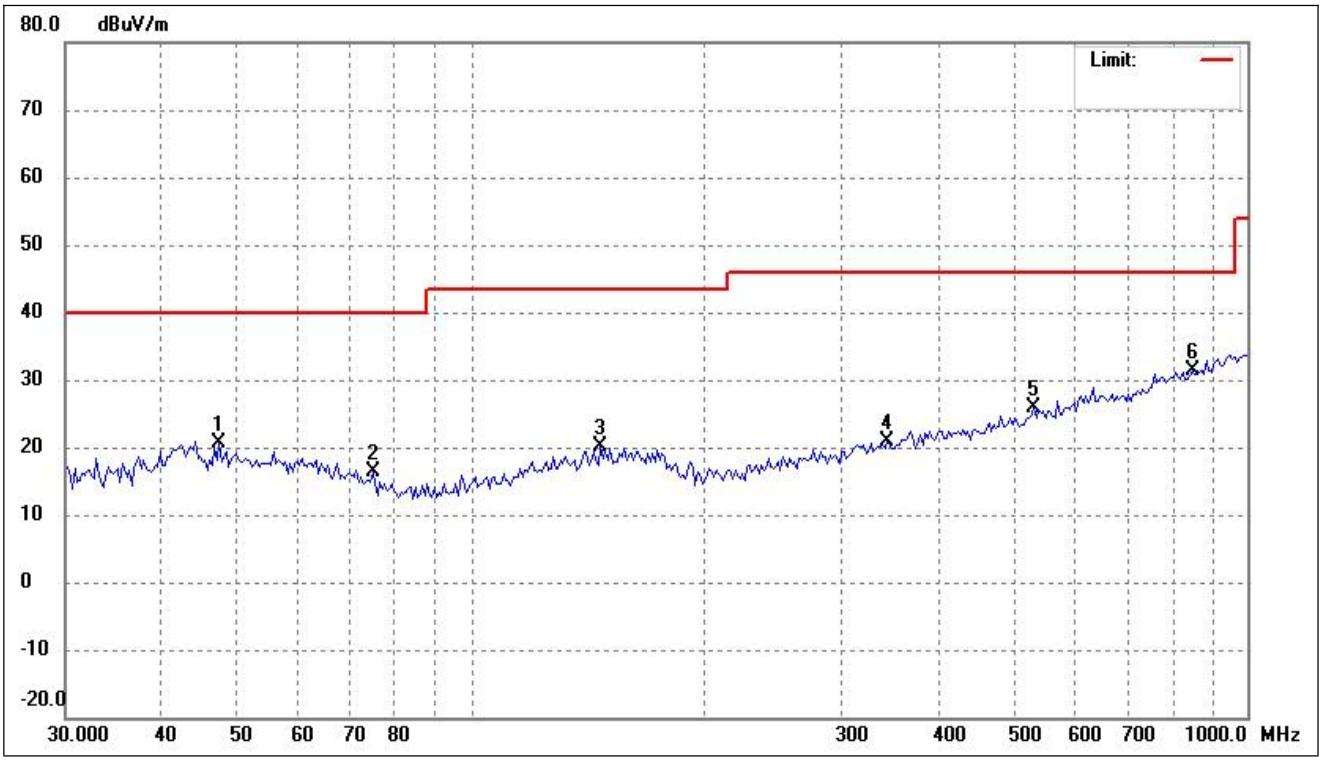
No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	42.6299	28.93	-7.96	20.97	40.00	-19.03	-	-	peak
2	48.3780	27.55	-7.71	19.84	40.00	-20.16	-	-	peak
3	160.8852	28.89	-8.08	20.81	43.50	-22.69	-	-	peak
4	368.6682	28.92	-6.71	22.21	46.00	-23.79	-	-	peak
5	535.0377	29.88	-4.01	25.87	46.00	-20.13	-	-	peak
6	862.8015	30.20	1.68	31.88	46.00	-14.12	-	-	peak

802.11n-HT20			
Test Channel	5180MHz(worst case)	Polarity:	Vertical



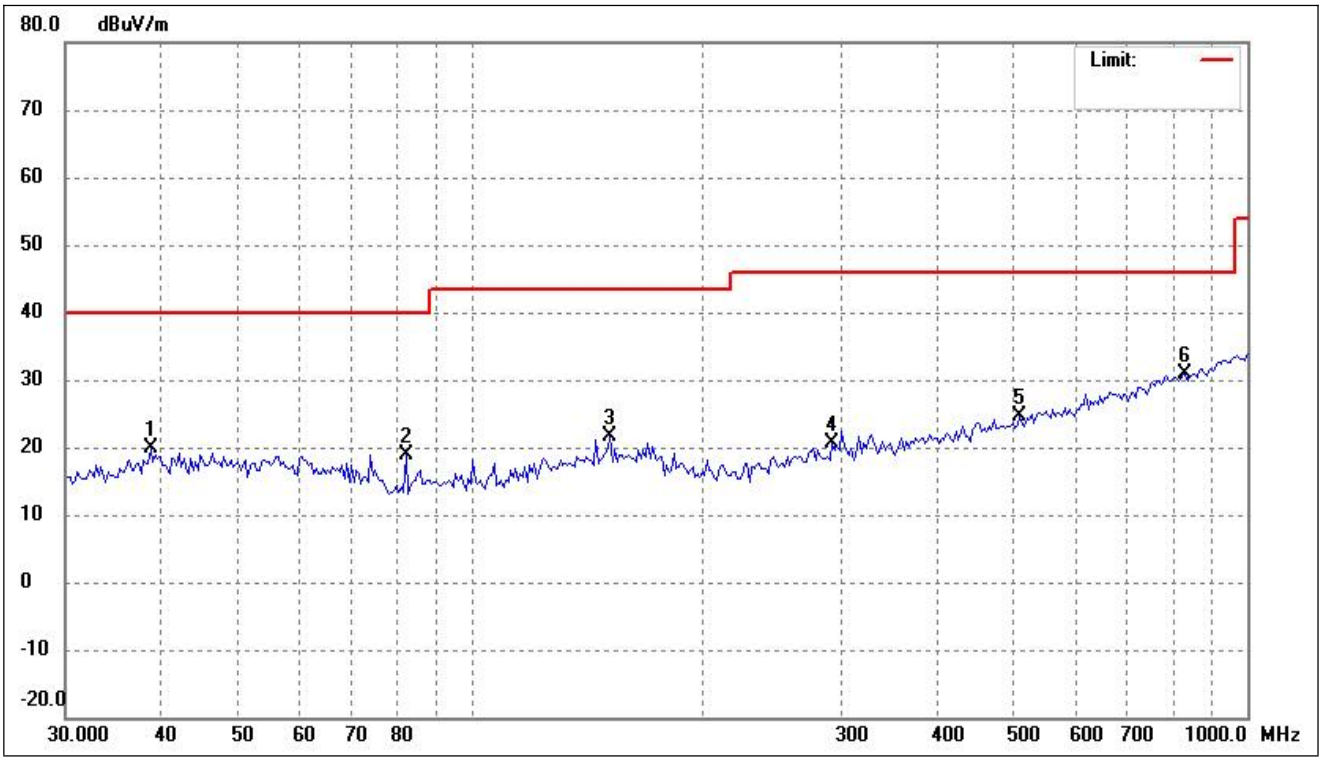
No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	51.1756	27.51	-7.72	19.79	40.00	-20.21	-	-	peak
2	74.2696	29.80	-11.18	18.62	40.00	-21.38	-	-	peak
3	133.0809	30.39	-9.18	21.21	43.50	-22.29	-	-	peak
4	300.6988	29.66	-7.85	21.81	46.00	-24.19	-	-	peak
5	607.1806	28.55	-2.11	26.44	46.00	-19.56	-	-	peak
6	932.1405	31.46	2.87	34.33	46.00	-11.67	-	-	peak

802.11ac-VHT20			
Test Channel	5180MHz(worst case)	Polarity:	Horizontal



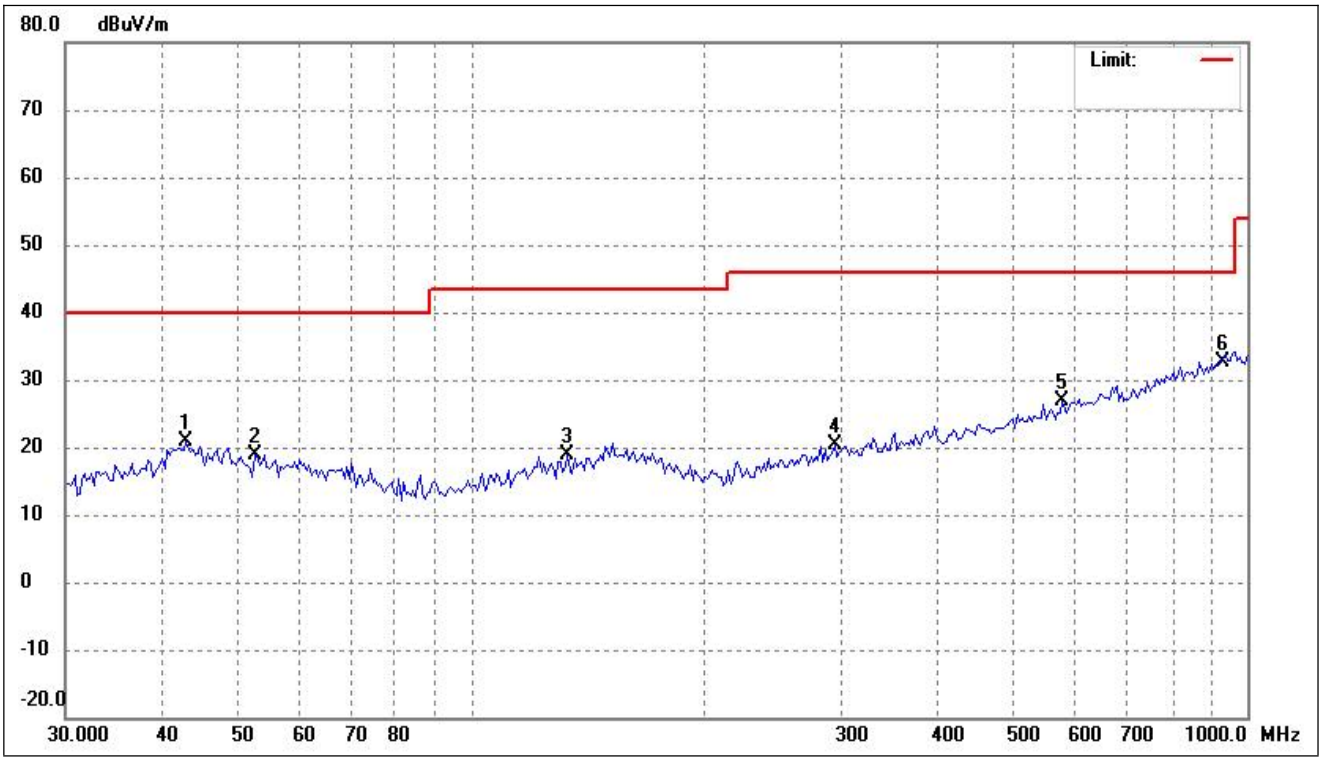
No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	47.3688	28.51	-7.78	20.73	40.00	-19.27	-	-	peak
2	74.7934	27.57	-11.30	16.27	40.00	-23.73	-	-	peak
3	146.8392	28.53	-8.31	20.22	43.50	-23.28	-	-	peak
4	343.6506	27.92	-7.13	20.79	46.00	-25.21	-	-	peak
5	531.2910	30.08	-4.12	25.96	46.00	-20.04	-	-	peak
6	850.7603	29.95	1.55	31.50	46.00	-14.50	-	-	peak

802.11ac-VHT20			
Test Channel	5180MHz(worst case)	Polarity:	Vertical



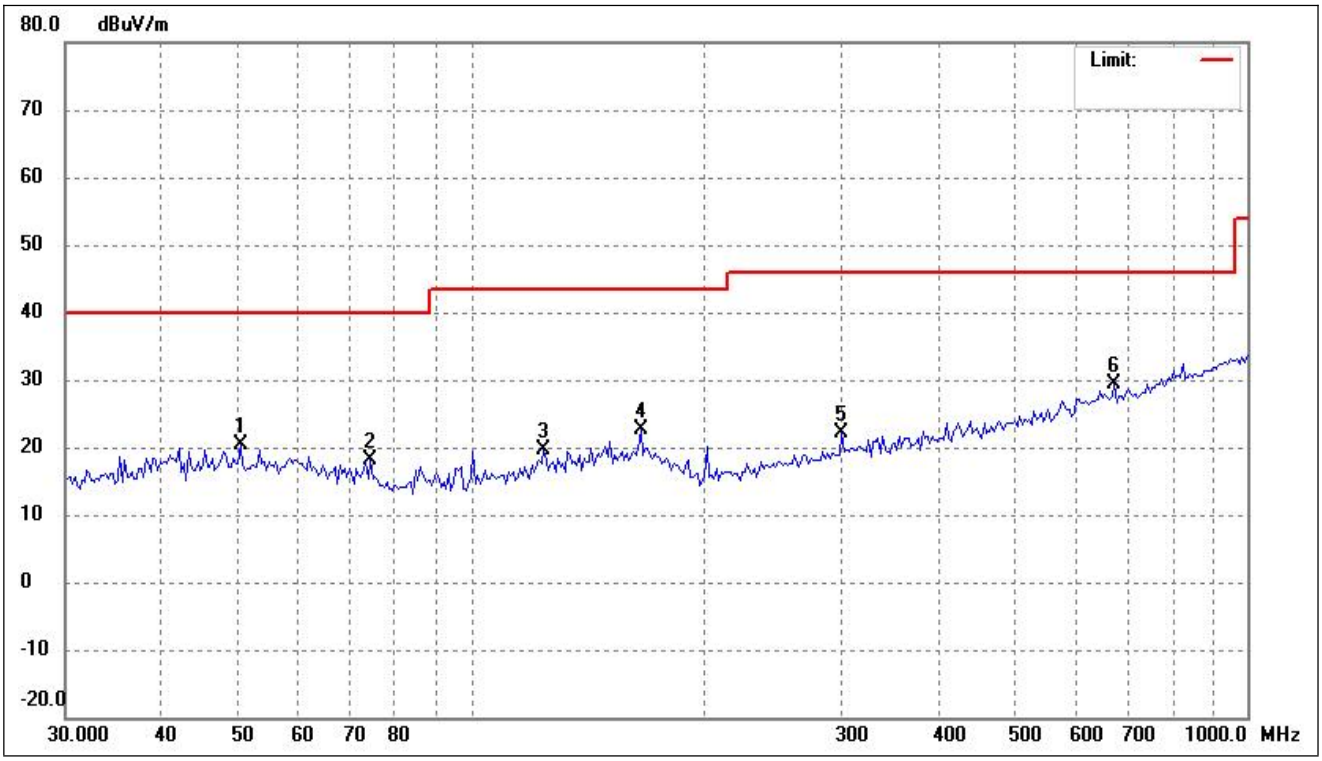
No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	38.6357	28.16	-8.25	19.91	40.00	-20.09	-	-	peak
2	82.5257	31.36	-12.48	18.88	40.00	-21.12	-	-	peak
3	151.0252	29.61	-8.05	21.56	43.50	-21.94	-	-	peak
4	292.3643	28.73	-8.11	20.62	46.00	-25.38	-	-	peak
5	509.3559	29.30	-4.62	24.68	46.00	-21.32	-	-	peak
6	827.1795	29.47	1.29	30.76	46.00	-15.24	-	-	peak

802.11n-HT40			
Test Channel	5190MHz(worst case)	Polarity:	Horizontal



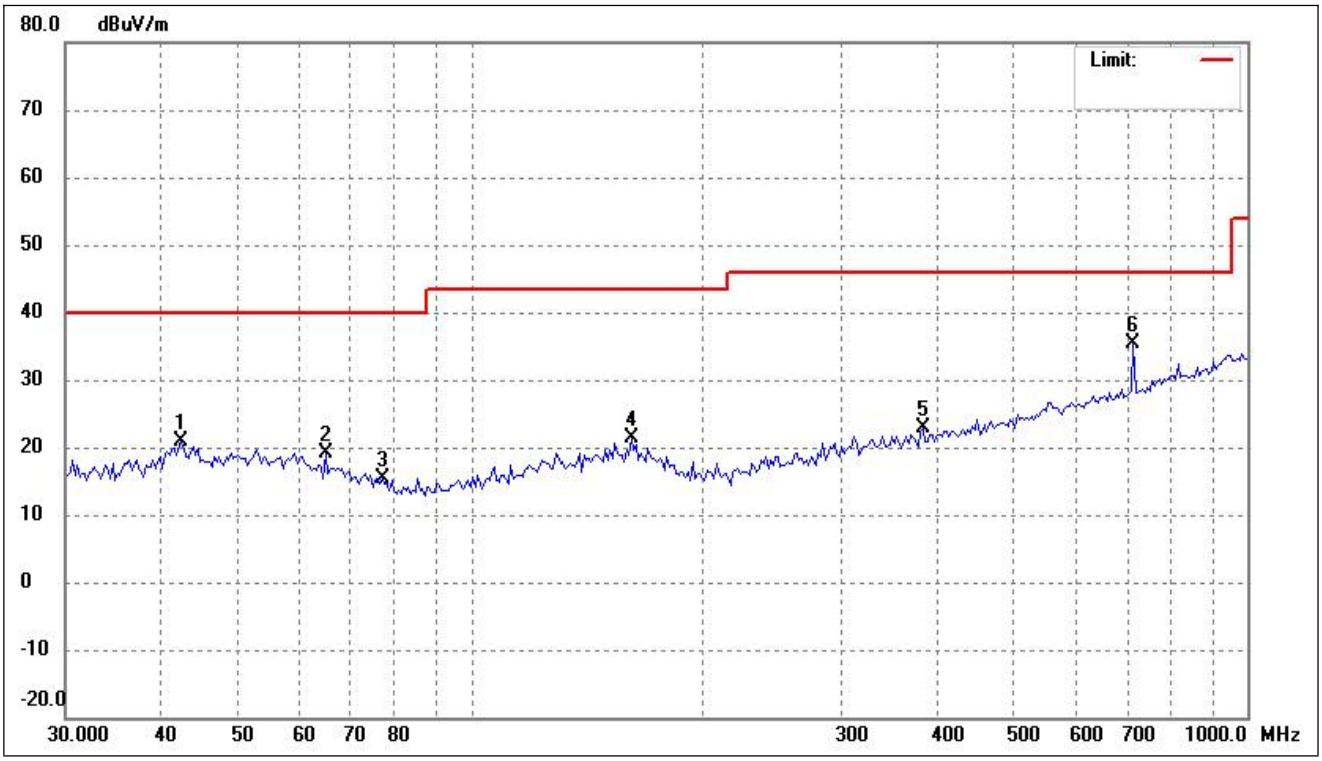
No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	42.9305	28.73	-7.96	20.77	40.00	-19.23	-	-	peak
2	52.6345	26.85	-7.87	18.98	40.00	-21.02	-	-	peak
3	133.0809	28.12	-9.18	18.94	43.50	-24.56	-	-	peak
4	294.4260	28.44	-8.04	20.40	46.00	-25.60	-	-	peak
5	578.0359	29.76	-2.78	26.98	46.00	-19.02	-	-	peak
6	925.6132	30.02	2.72	32.74	46.00	-13.26	-	-	peak

802.11n-HT40			
Test Channel	5190MHz(worst case)	Polarity:	Vertical



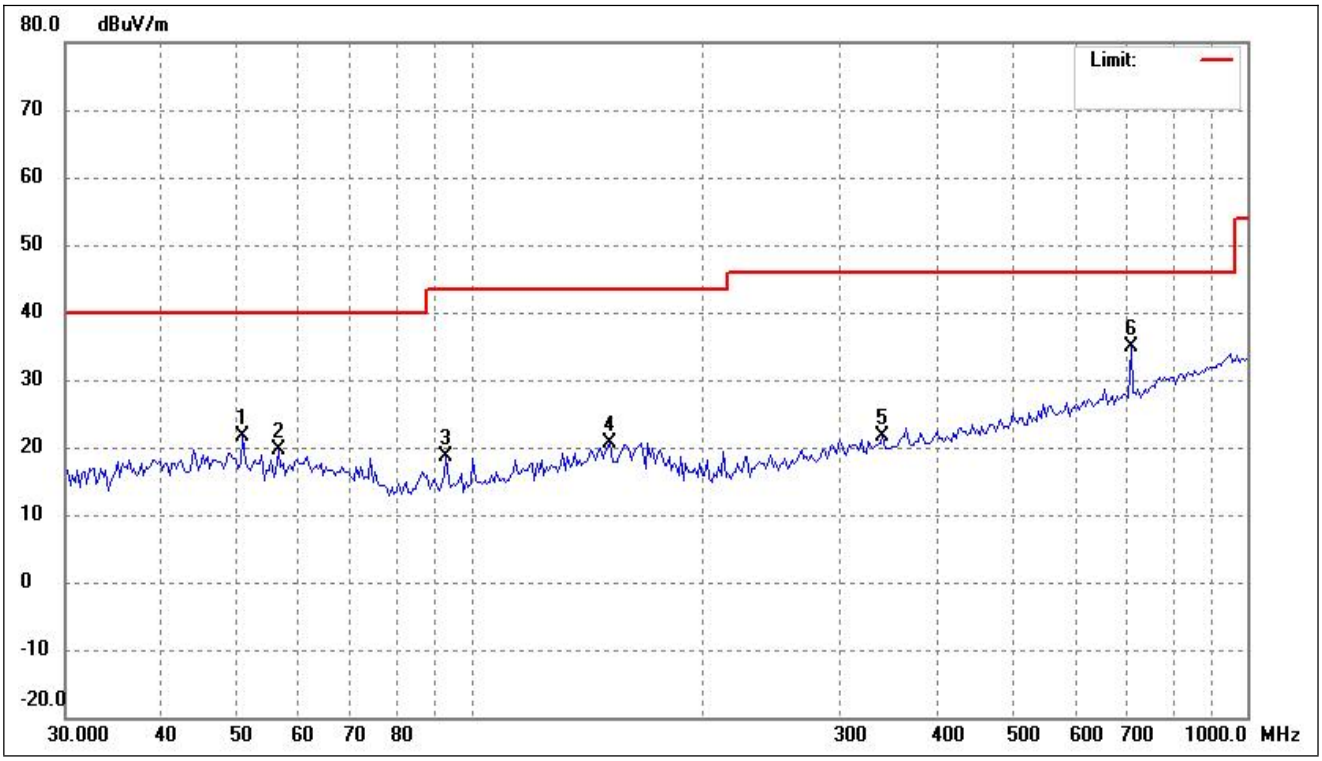
No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	50.4614	27.94	-7.64	20.30	40.00	-19.70	-	-	peak
2	74.2696	29.21	-11.18	18.03	40.00	-21.97	-	-	peak
3	124.0501	29.40	-9.73	19.67	43.50	-23.83	-	-	peak
4	165.4716	30.81	-8.19	22.62	43.50	-20.88	-	-	peak
5	300.6988	30.02	-7.85	22.17	46.00	-23.83	-	-	peak
6	674.6768	30.77	-1.37	29.40	46.00	-16.60	-	-	peak

802.11ac-VHT40			
Test Channel	5190MHz(worst case)	Polarity:	Horizontal



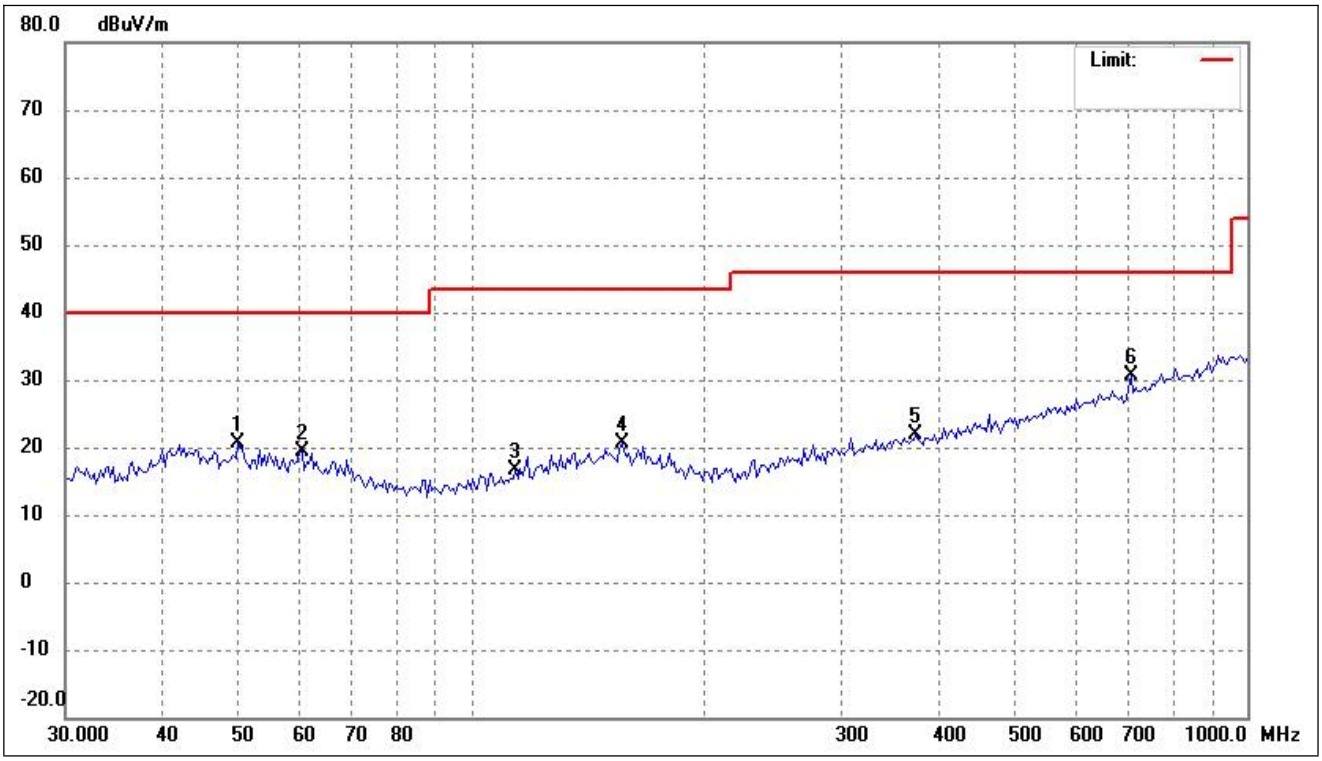
No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	42.3314	28.89	-7.96	20.93	40.00	-19.07	-	-	peak
2	64.9869	28.46	-9.33	19.13	40.00	-20.87	-	-	peak
3	76.9256	27.21	-11.76	15.45	40.00	-24.55	-	-	peak
4	160.8852	29.44	-8.08	21.36	43.50	-22.14	-	-	peak
5	381.8520	29.29	-6.50	22.79	46.00	-23.21	-	-	peak
6	713.6917	36.09	-0.75	35.34	46.00	-10.66	-	-	peak

802.11ac-VHT40			
Test Channel	5190MHz(worst case)	Polarity:	Vertical



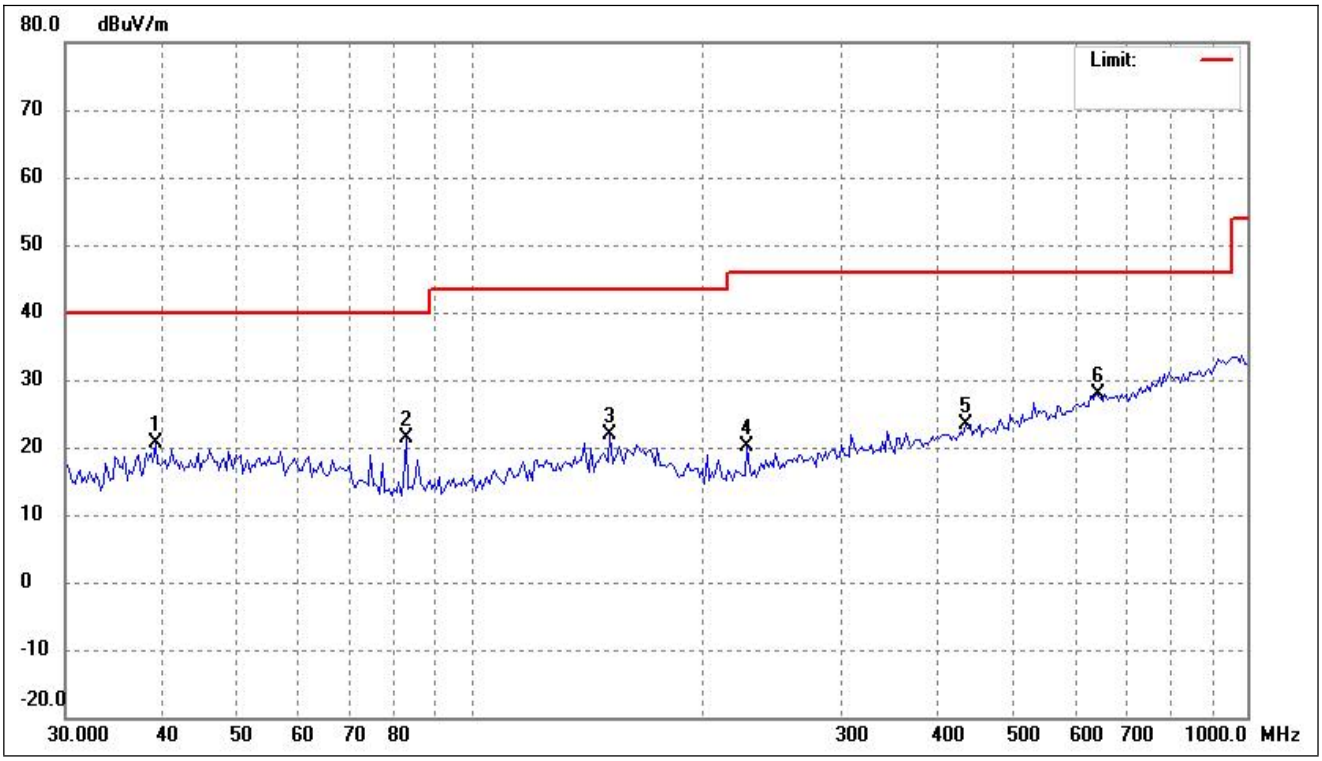
No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	50.8172	29.31	-7.67	21.64	40.00	-18.36	-	-	peak
2	56.4662	27.96	-8.21	19.75	40.00	-20.25	-	-	peak
3	92.9974	31.09	-12.42	18.67	43.50	-24.83	-	-	peak
4	151.0252	28.79	-8.05	20.74	43.50	-22.76	-	-	peak
5	338.8546	28.75	-7.18	21.57	46.00	-24.43	-	-	peak
6	708.6941	35.78	-0.88	34.90	46.00	-11.10	-	-	peak

802.11ac-VHT80			
Test Channel	5210MHz(worst case)	Polarity:	Horizontal



No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	50.1080	28.25	-7.59	20.66	40.00	-19.34	-	-	peak
2	60.5769	27.93	-8.54	19.39	40.00	-20.61	-	-	peak
3	114.0184	27.23	-10.64	16.59	43.50	-26.91	-	-	peak
4	156.4259	28.62	-8.05	20.57	43.50	-22.93	-	-	peak
5	373.8862	28.46	-6.62	21.84	46.00	-24.16	-	-	peak
6	708.6941	31.40	-0.88	30.52	46.00	-15.48	-	-	peak

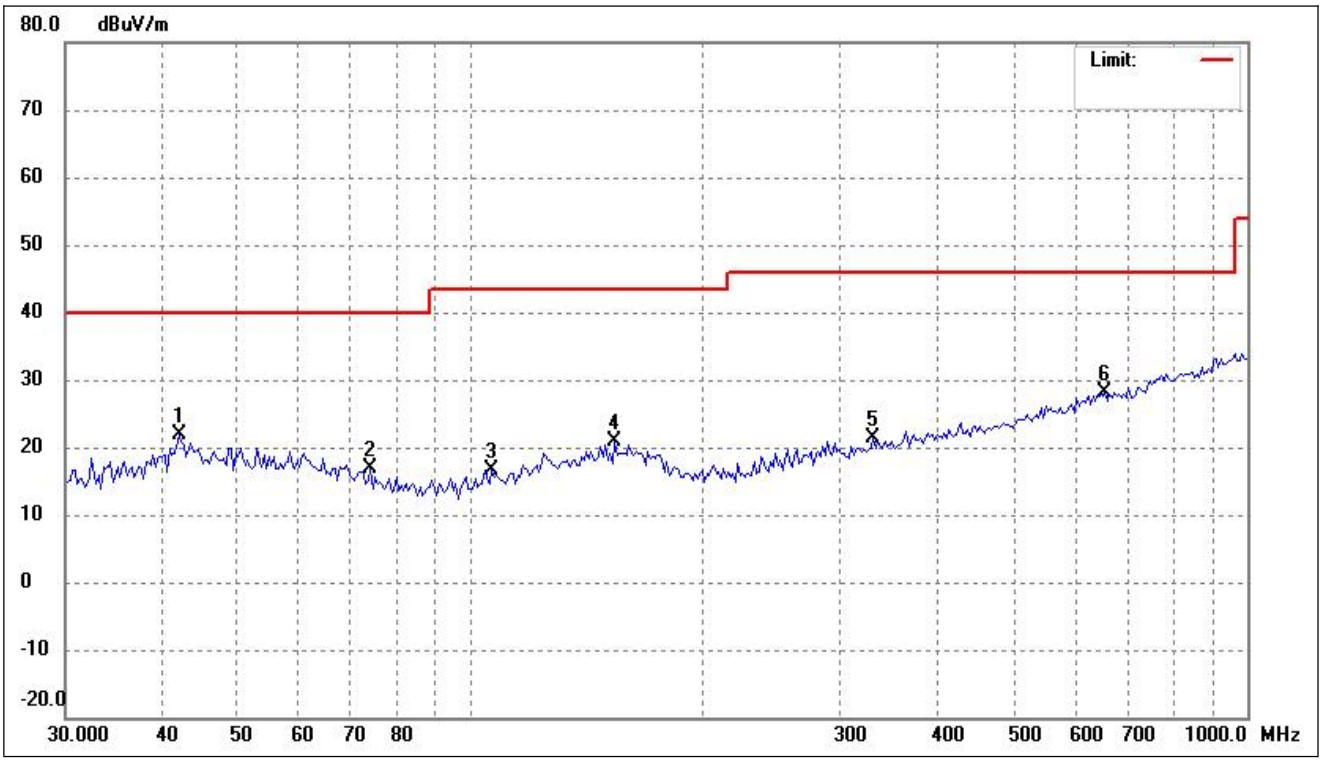
802.11ac-VHT80			
Test Channel	5210MHz(worst case)	Polarity:	Vertical



No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	39.1825	28.84	-8.12	20.72	40.00	-19.28	-	-	peak
2	82.5257	33.81	-12.48	21.33	40.00	-18.67	-	-	peak
3	151.0252	29.83	-8.05	21.78	43.50	-21.72	-	-	peak
4	227.0164	31.47	-11.22	20.25	46.00	-25.75	-	-	peak
5	433.3397	28.85	-5.55	23.30	46.00	-22.70	-	-	peak
6	642.2923	29.50	-1.62	27.88	46.00	-18.12	-	-	peak

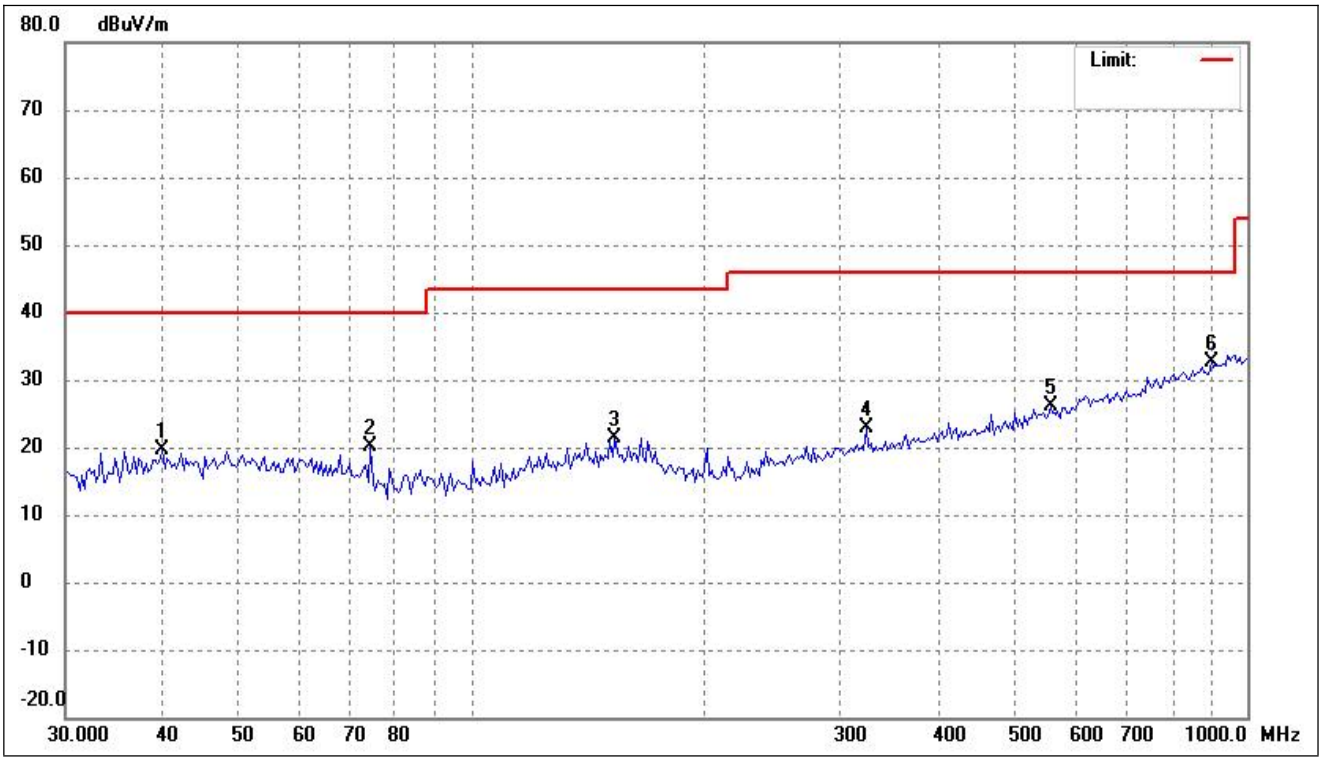
➢ 5250-5350MHz

802.11a			
Test Channel	5260MHz	Polarity:	Horizontal



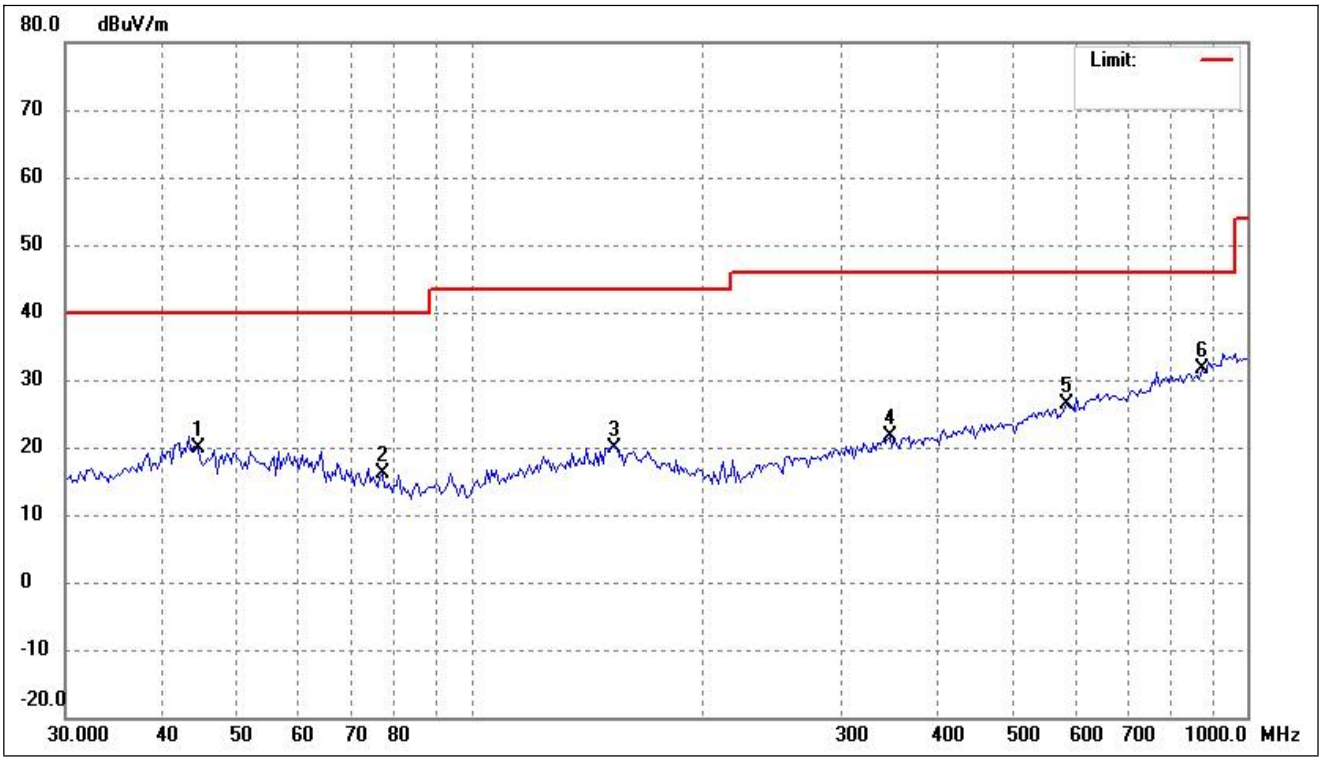
No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	42.0350	29.71	-7.95	21.76	40.00	-18.24	-	-	peak
2	74.2696	28.01	-11.18	16.83	40.00	-23.17	-	-	peak
3	106.2812	28.03	-11.41	16.62	43.50	-26.88	-	-	peak
4	153.1627	28.95	-8.05	20.90	43.50	-22.60	-	-	peak
5	329.4625	28.70	-7.28	21.42	46.00	-24.58	-	-	peak
6	655.9766	29.56	-1.52	28.04	46.00	-17.96	-	-	peak

802.11a			
Test Channel	5260MHz(worst case)	Polarity:	Vertical



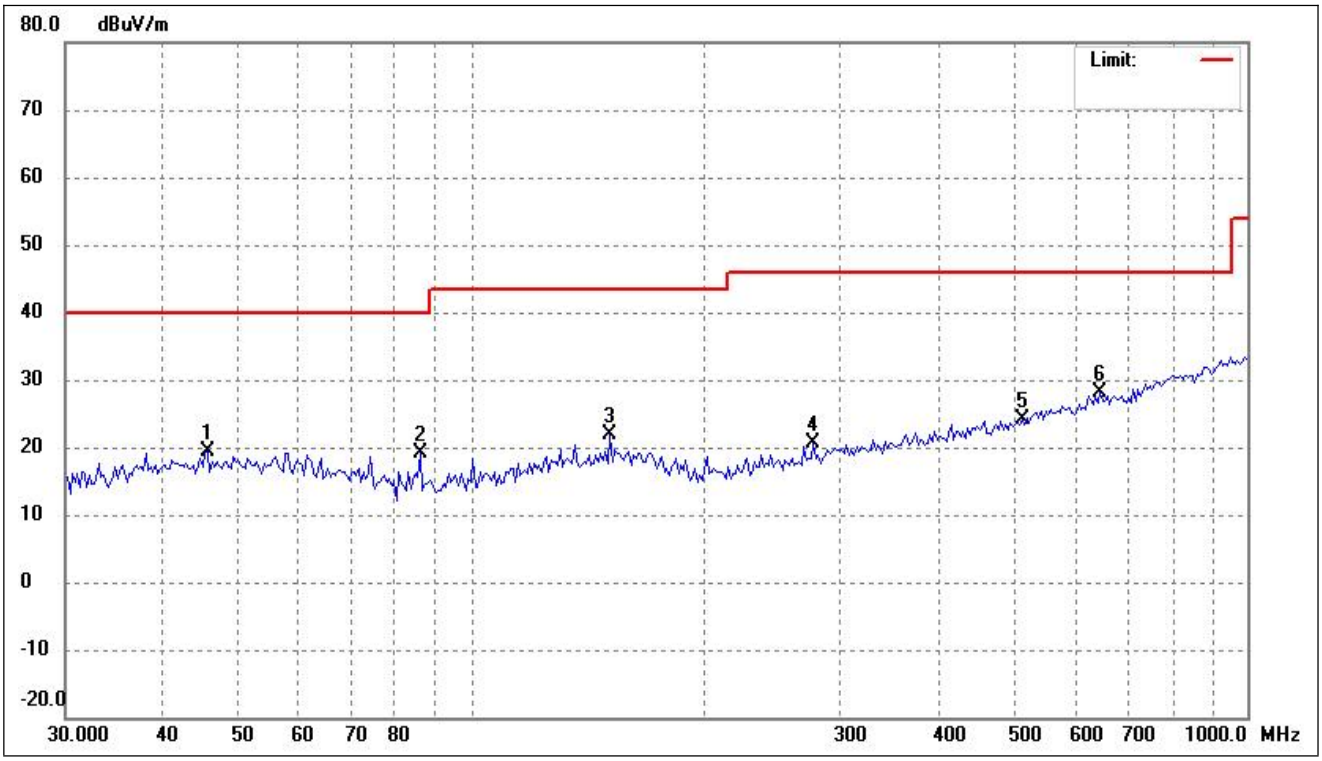
No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	40.0173	27.47	-7.95	19.52	40.00	-20.48	-	-	peak
2	74.2696	31.19	-11.18	20.01	40.00	-19.99	-	-	peak
3	153.1627	29.44	-8.05	21.39	43.50	-22.11	-	-	peak
4	322.5896	30.19	-7.38	22.81	46.00	-23.19	-	-	peak
5	558.0788	29.46	-3.33	26.13	46.00	-19.87	-	-	peak
6	899.9577	30.49	2.09	32.58	46.00	-13.42	-	-	peak

802.11n-HT20			
Test Channel	5260MHz(worst case)	Polarity:	Horizontal



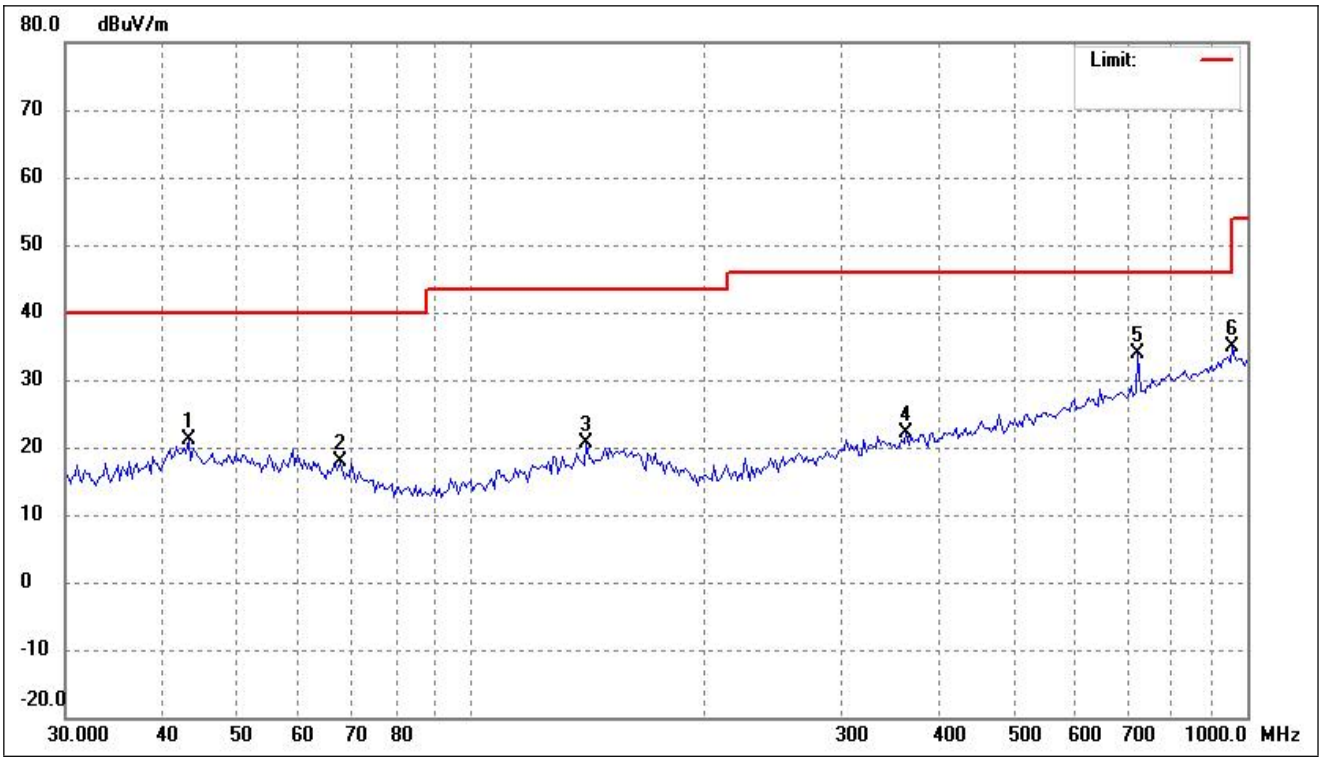
No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	44.4657	27.81	-7.96	19.85	40.00	-20.15	-	-	peak
2	76.9256	27.90	-11.76	16.14	40.00	-23.86	-	-	peak
3	154.2428	28.04	-8.05	19.99	43.50	-23.51	-	-	peak
4	346.0740	28.61	-7.10	21.51	46.00	-24.49	-	-	peak
5	586.2172	28.92	-2.58	26.34	46.00	-19.66	-	-	peak
6	875.0133	29.75	1.82	31.57	46.00	-14.43	-	-	peak

802.11n-HT20			
Test Channel	5260MHz(worst case)	Polarity:	Vertical



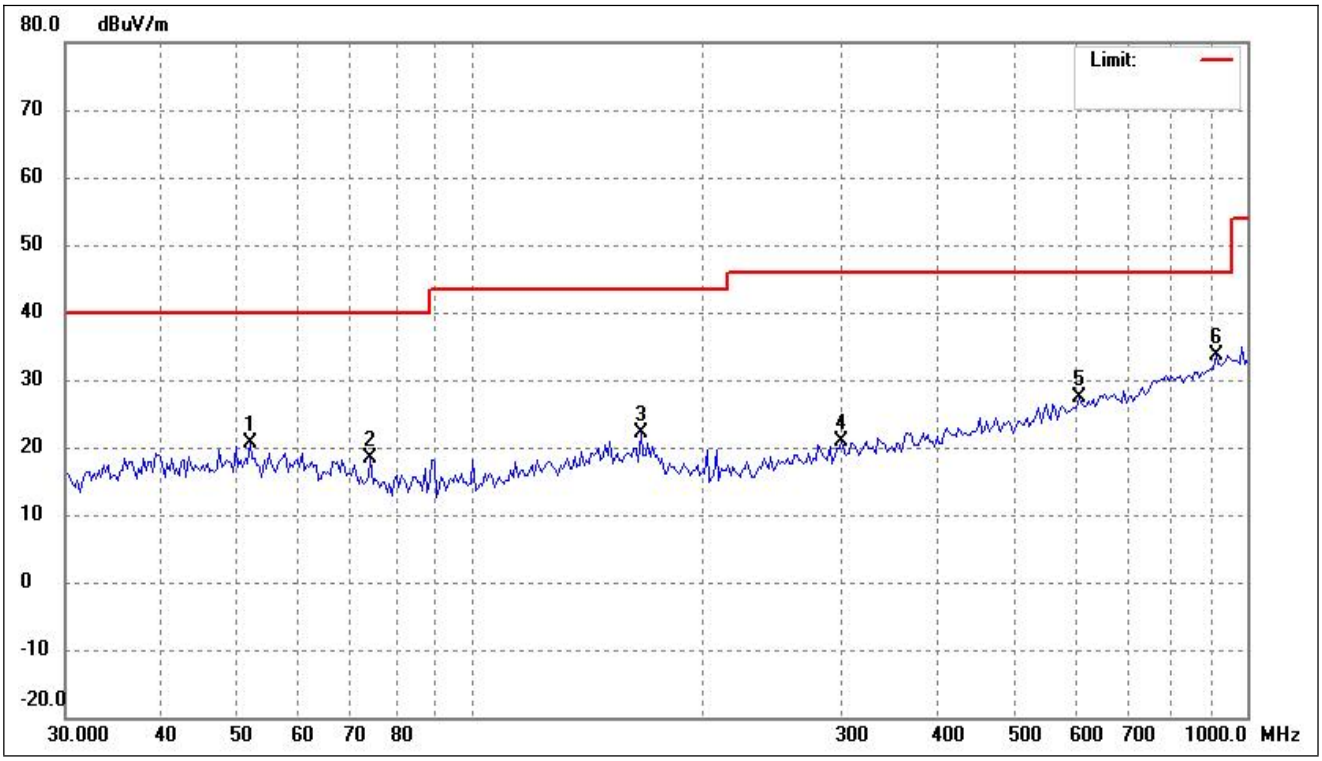
No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	45.7333	27.21	-7.90	19.31	40.00	-20.69	-	-	peak
2	86.0796	31.75	-12.53	19.22	40.00	-20.78	-	-	peak
3	151.0252	29.82	-8.05	21.77	43.50	-21.73	-	-	peak
4	276.3818	29.22	-8.62	20.60	46.00	-25.40	-	-	peak
5	512.9478	28.79	-4.55	24.24	46.00	-21.76	-	-	peak
6	646.8217	29.60	-1.59	28.01	46.00	-17.99	-	-	peak

802.11ac-VHT20			
Test Channel	5260MHz(worst case)	Polarity:	Horizontal



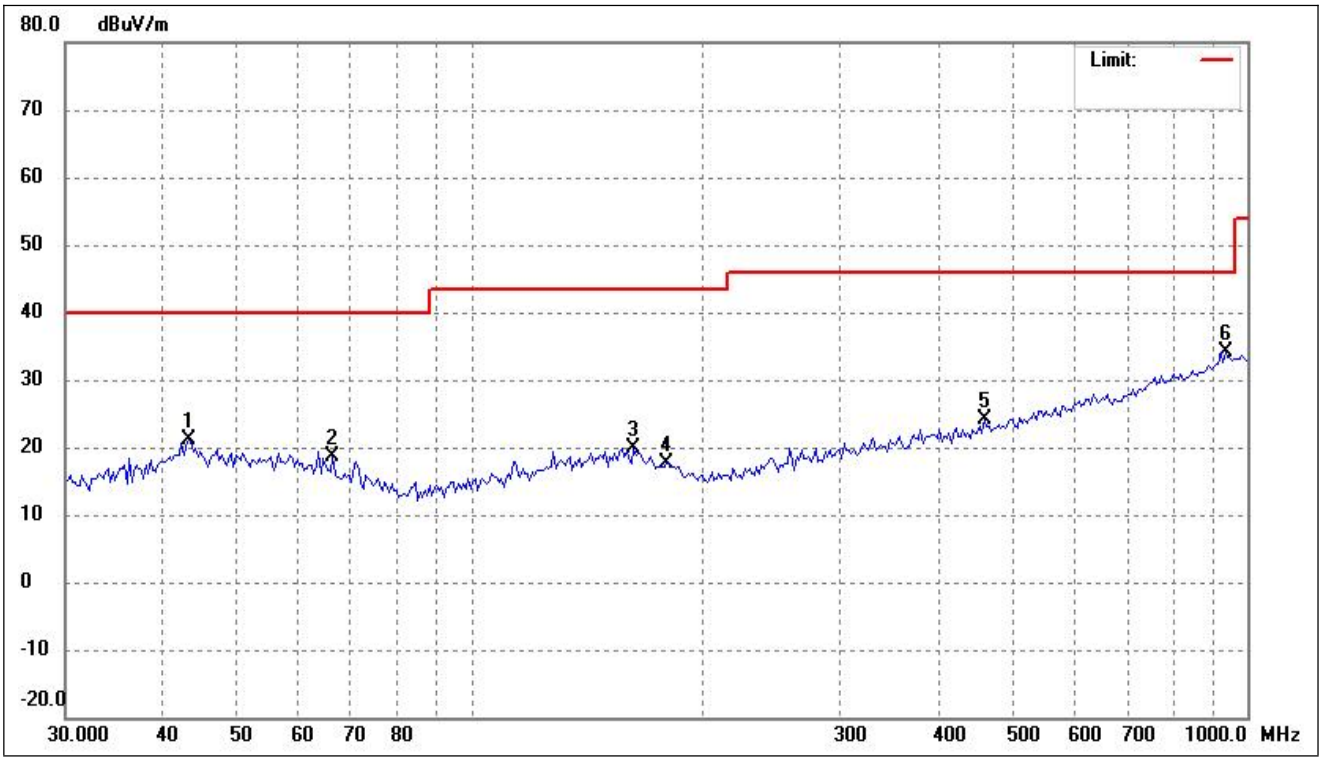
No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	43.2333	28.98	-7.95	21.03	40.00	-18.97	-	-	peak
2	67.7856	27.85	-9.85	18.00	40.00	-22.00	-	-	peak
3	140.7767	29.50	-8.83	20.67	43.50	-22.83	-	-	peak
4	363.5231	28.88	-6.81	22.07	46.00	-23.93	-	-	peak
5	723.7930	34.39	-0.49	33.90	46.00	-12.10	-	-	peak
6	958.7135	31.59	3.34	34.93	46.00	-11.07	-	-	peak

802.11ac-VHT20			
Test Channel	5260MHz(worst case)	Polarity:	Vertical



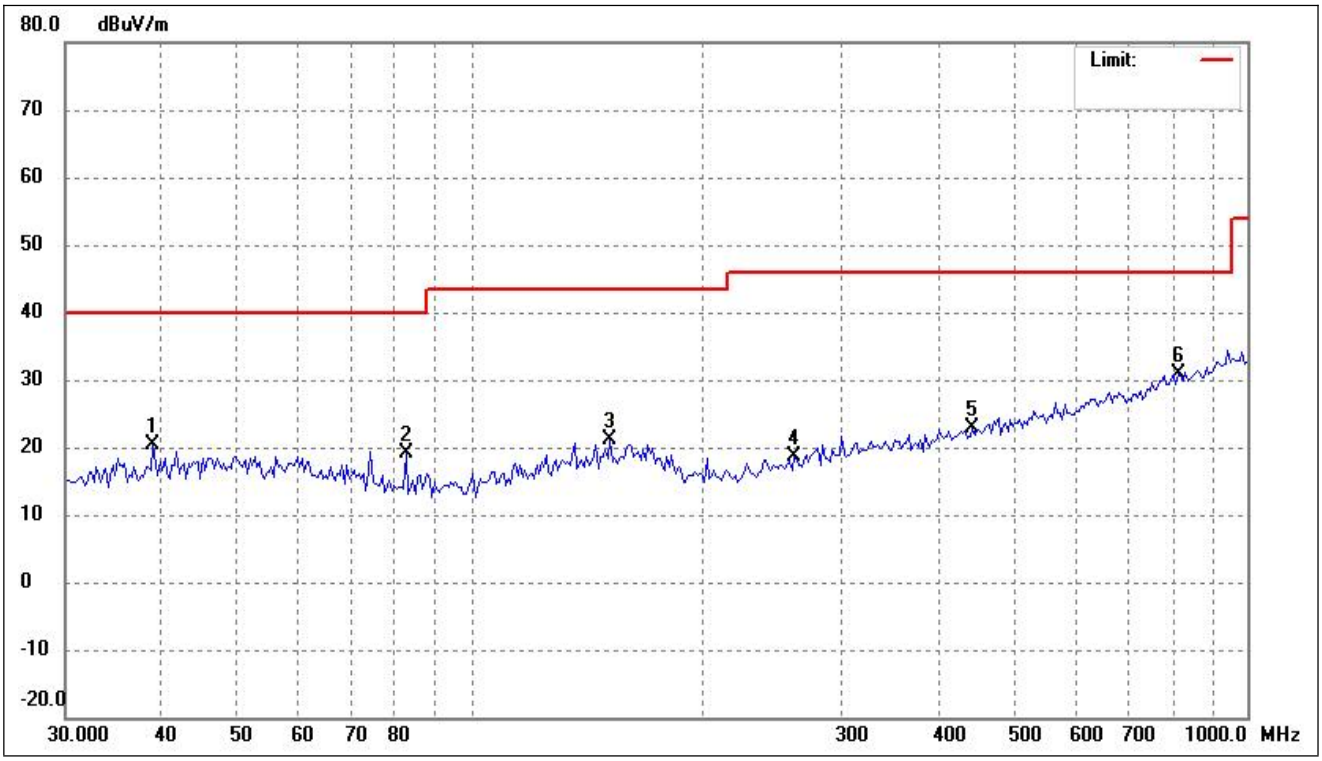
No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	51.8999	28.51	-7.79	20.72	40.00	-19.28	-	-	peak
2	74.2696	29.47	-11.18	18.29	40.00	-21.71	-	-	peak
3	165.4716	30.29	-8.19	22.10	43.50	-21.40	-	-	peak
4	300.6988	28.74	-7.85	20.89	46.00	-25.11	-	-	peak
5	607.1806	29.42	-2.11	27.31	46.00	-18.69	-	-	peak
6	912.6953	31.28	2.40	33.68	46.00	-12.32	-	-	peak

802.11n-HT40			
Test Channel	5270MHz(worst case)	Polarity:	Horizontal



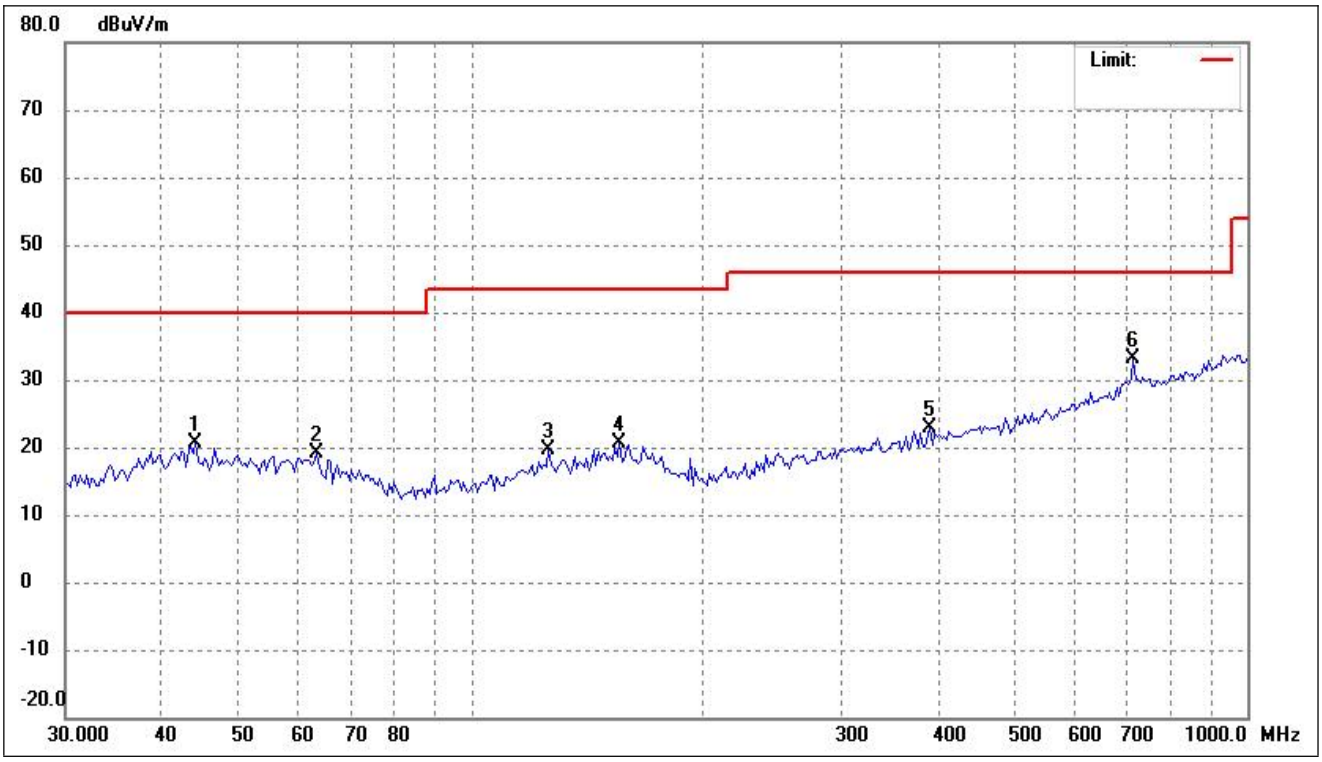
No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	43.2333	29.11	-7.95	21.16	40.00	-18.84	-	-	peak
2	66.3715	28.28	-9.59	18.69	40.00	-21.31	-	-	peak
3	162.0197	28.00	-8.10	19.90	43.50	-23.60	-	-	peak
4	178.7697	27.32	-9.57	17.75	43.50	-25.75	-	-	peak
5	458.3987	29.23	-5.12	24.11	46.00	-21.89	-	-	peak
6	938.7139	31.08	3.03	34.11	46.00	-11.89	-	-	peak

802.11n-HT40			
Test Channel	5270MHz(worst case)	Polarity:	Vertical



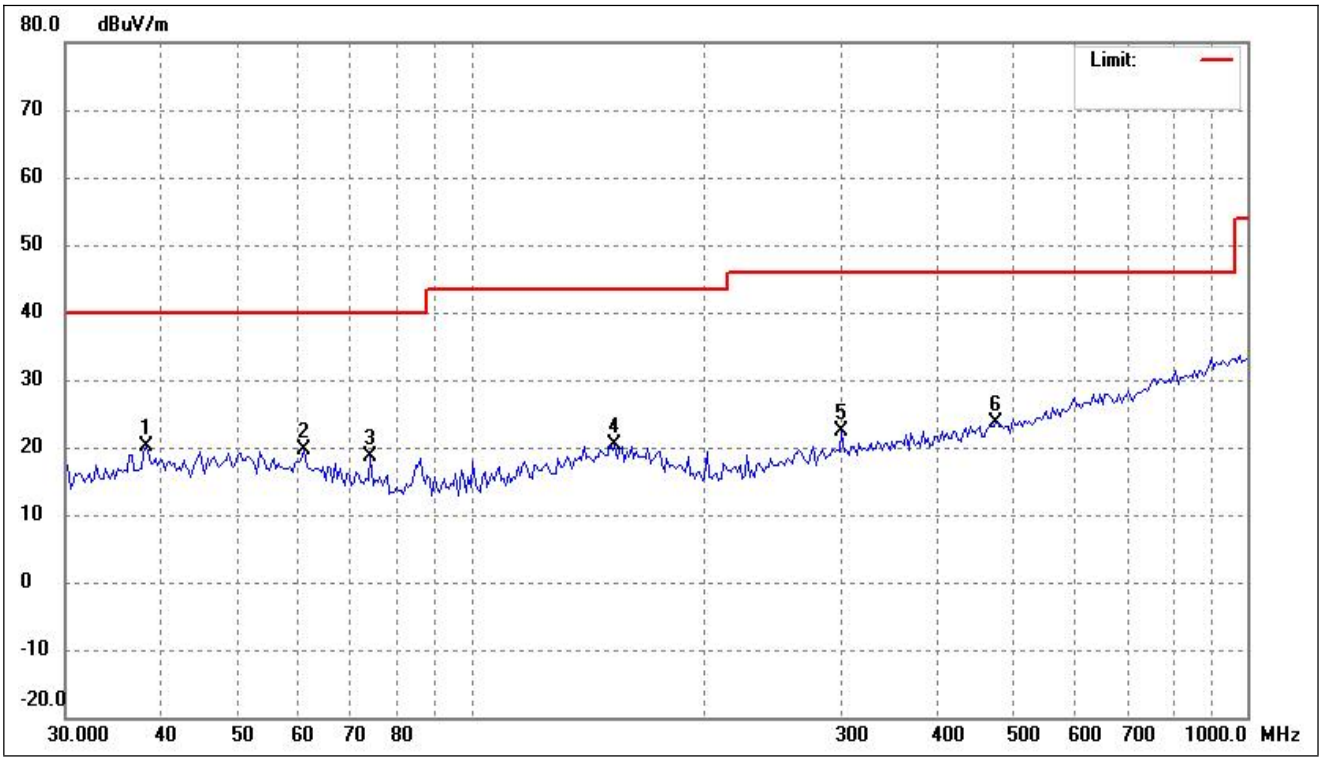
No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	38.9081	28.46	-8.19	20.27	40.00	-19.73	-	-	peak
2	82.5257	31.66	-12.48	19.18	40.00	-20.82	-	-	peak
3	151.0252	29.06	-8.05	21.01	43.50	-22.49	-	-	peak
4	261.2730	27.76	-9.24	18.52	46.00	-27.48	-	-	peak
5	442.5722	28.20	-5.35	22.85	46.00	-23.15	-	-	peak
6	815.6353	29.78	1.17	30.95	46.00	-15.05	-	-	peak

802.11ac-VHT40			
Test Channel	5270MHz(worst case)	Polarity:	Horizontal



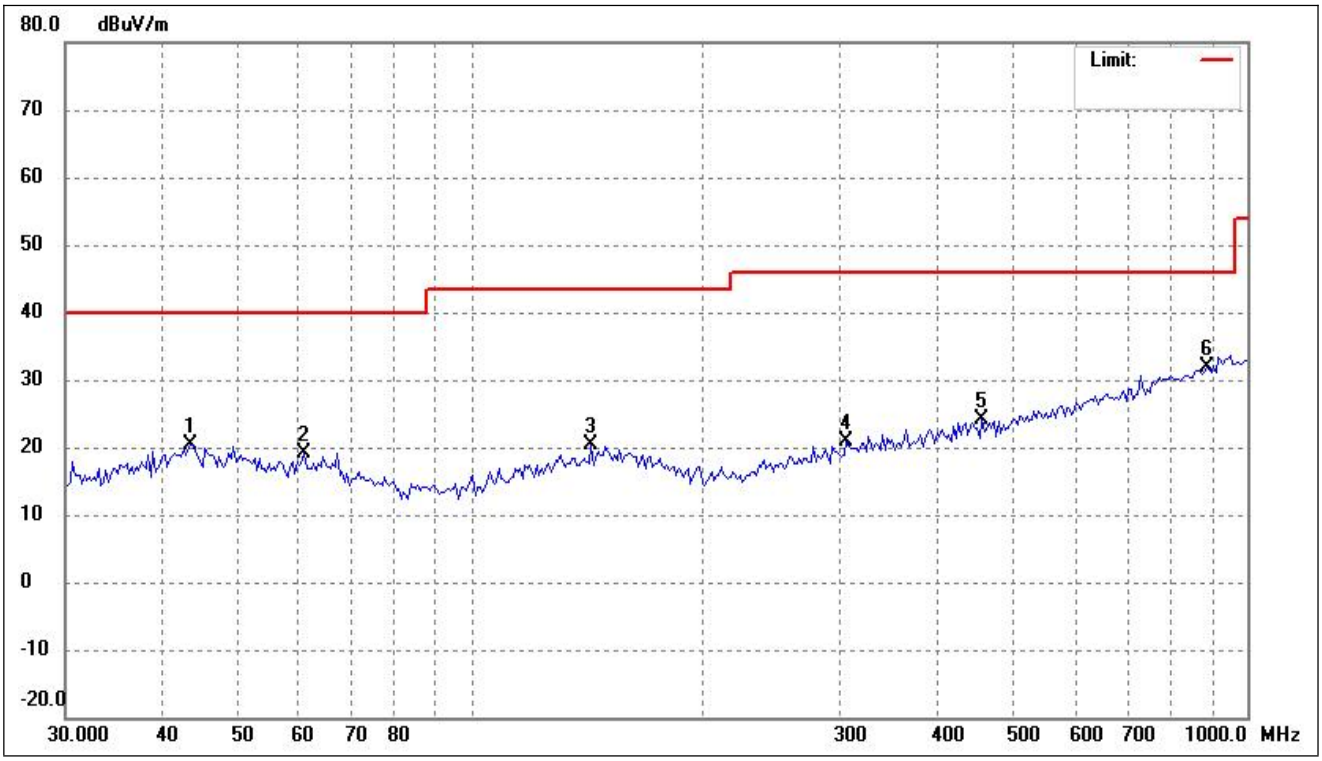
No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	44.1544	28.52	-7.96	20.56	40.00	-19.44	-	-	peak
2	63.1857	28.22	-9.01	19.21	40.00	-20.79	-	-	peak
3	125.8059	29.25	-9.61	19.64	43.50	-23.86	-	-	peak
4	155.3305	28.56	-8.05	20.51	43.50	-22.99	-	-	peak
5	389.9874	29.19	-6.39	22.80	46.00	-23.20	-	-	peak
6	713.6917	33.85	-0.75	33.10	46.00	-12.90	-	-	peak

802.11ac-VHT40			
Test Channel	5270MHz(worst case)	Polarity:	Vertical



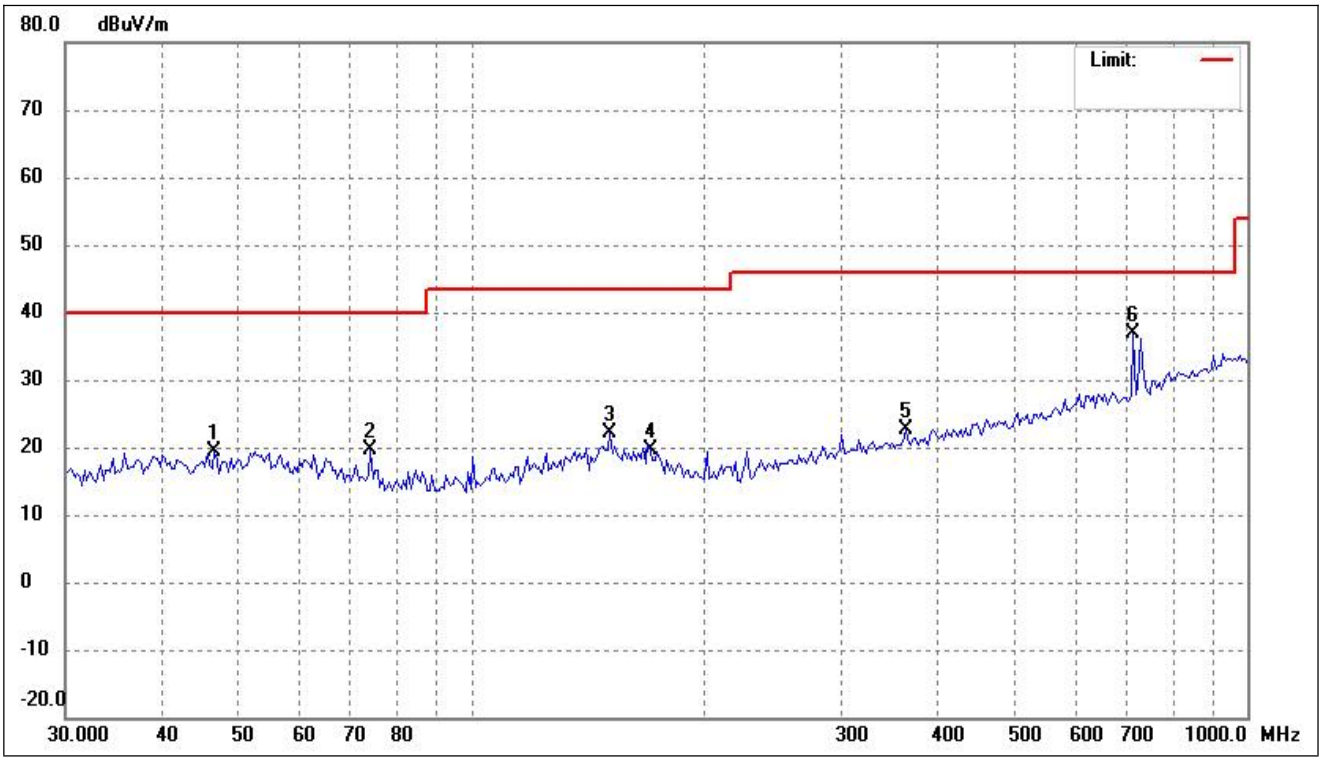
No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	38.0965	28.38	-8.36	20.02	40.00	-19.98	-	-	peak
2	61.0041	28.32	-8.61	19.71	40.00	-20.29	-	-	peak
3	74.2696	29.93	-11.18	18.75	40.00	-21.25	-	-	peak
4	153.1627	28.41	-8.05	20.36	43.50	-23.14	-	-	peak
5	300.6988	30.15	-7.85	22.30	46.00	-23.70	-	-	peak
6	474.7913	28.66	-4.99	23.67	46.00	-22.33	-	-	peak

802.11ac-VHT80			
Test Channel	5290MHz(worst case)	Polarity:	Horizontal



No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	43.5381	28.40	-7.95	20.45	40.00	-19.55	-	-	peak
2	61.0041	27.84	-8.61	19.23	40.00	-20.77	-	-	peak
3	142.7692	28.95	-8.66	20.29	43.50	-23.21	-	-	peak
4	304.9548	28.68	-7.76	20.92	46.00	-25.08	-	-	peak
5	455.1888	29.38	-5.15	24.23	46.00	-21.77	-	-	peak
6	887.3978	29.88	1.95	31.83	46.00	-14.17	-	-	peak

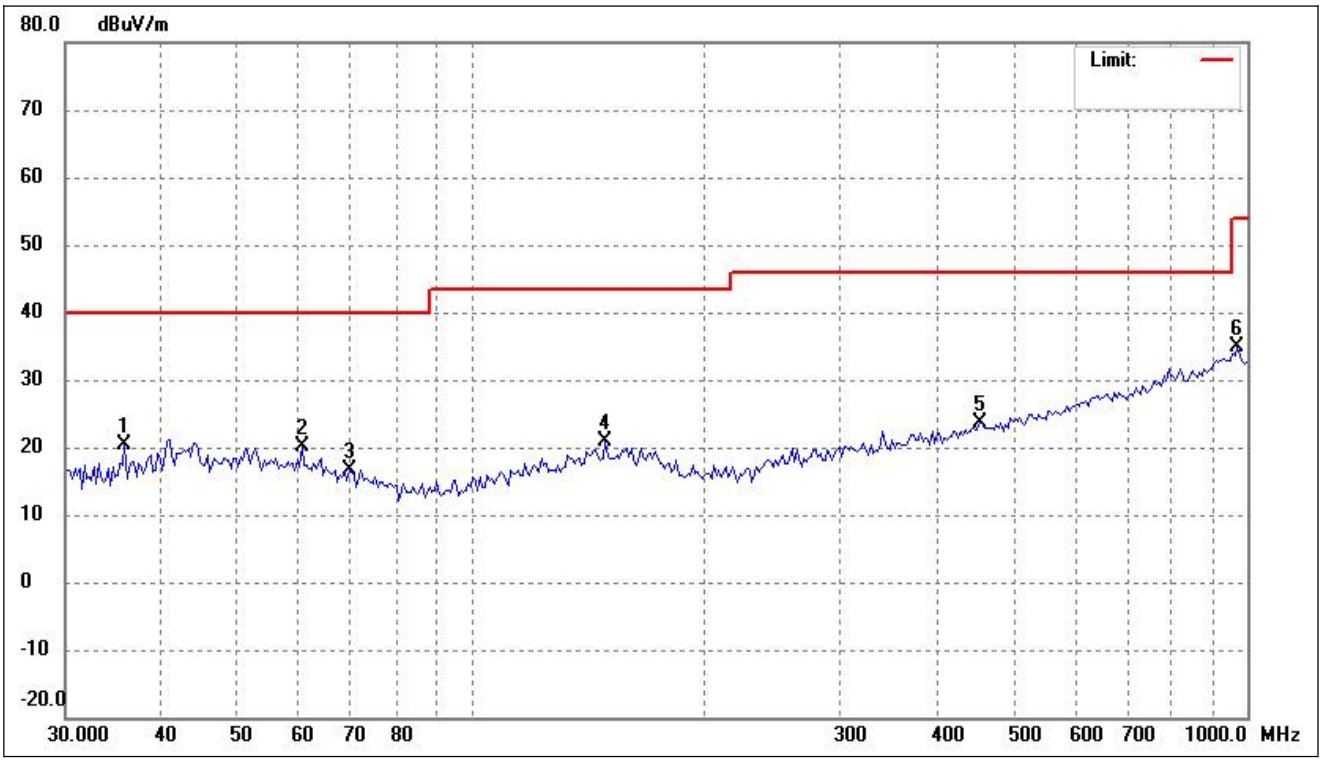
802.11ac-VHT80			
Test Channel	5290MHz(worst case)	Polarity:	Vertical



No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	46.7077	27.24	-7.83	19.41	40.00	-20.59	-	-	peak
2	74.2696	30.78	-11.18	19.60	40.00	-20.40	-	-	peak
3	151.0252	30.13	-8.05	22.08	43.50	-21.42	-	-	peak
4	170.1888	27.95	-8.34	19.61	43.50	-23.89	-	-	peak
5	363.5231	29.46	-6.81	22.65	46.00	-23.35	-	-	peak
6	713.6917	37.56	-0.75	36.81	46.00	-9.19	-	-	peak

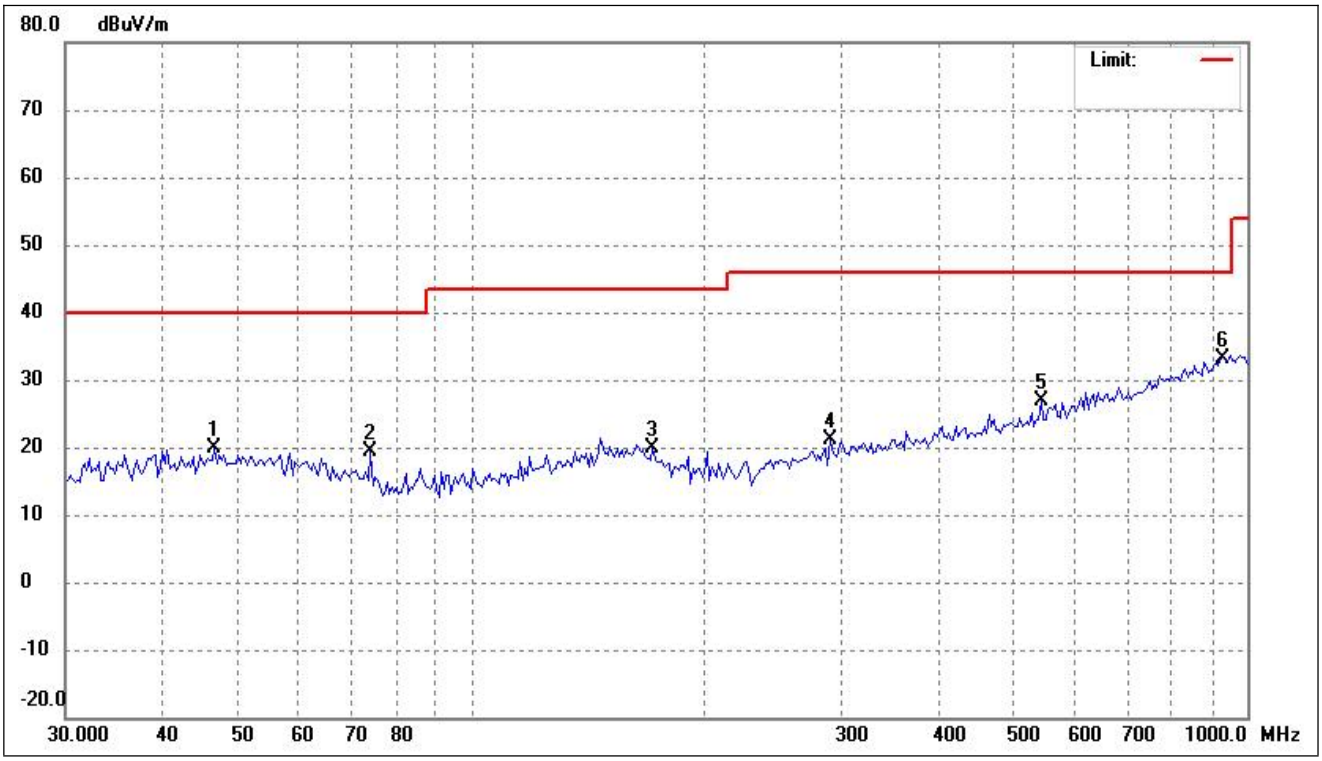
➢ 5470-5725MHz

802.11a			
Test Channel	5500MHz(worst case)	Polarity:	Horizontal



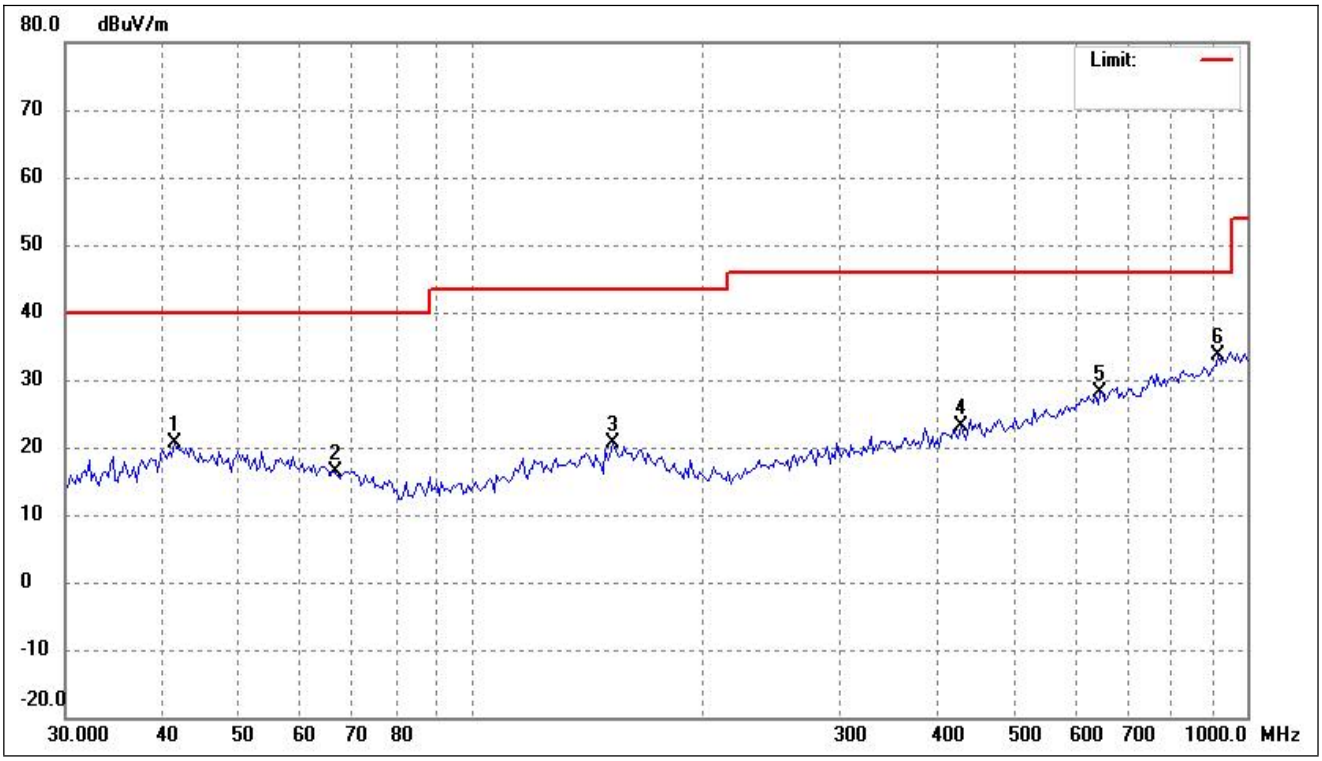
No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	35.7617	29.14	-8.85	20.29	40.00	-19.71	-	-	peak
2	60.5769	28.71	-8.54	20.17	40.00	-19.83	-	-	peak
3	69.7179	26.94	-10.20	16.74	40.00	-23.26	-	-	peak
4	148.9175	28.91	-8.14	20.77	43.50	-22.73	-	-	peak
5	452.0013	28.77	-5.17	23.60	46.00	-22.40	-	-	peak
6	972.2827	31.44	3.39	34.83	54.00	-19.17	-	-	peak

802.11a			
Test Channel	5500MHz(worst case)	Polarity:	Vertical



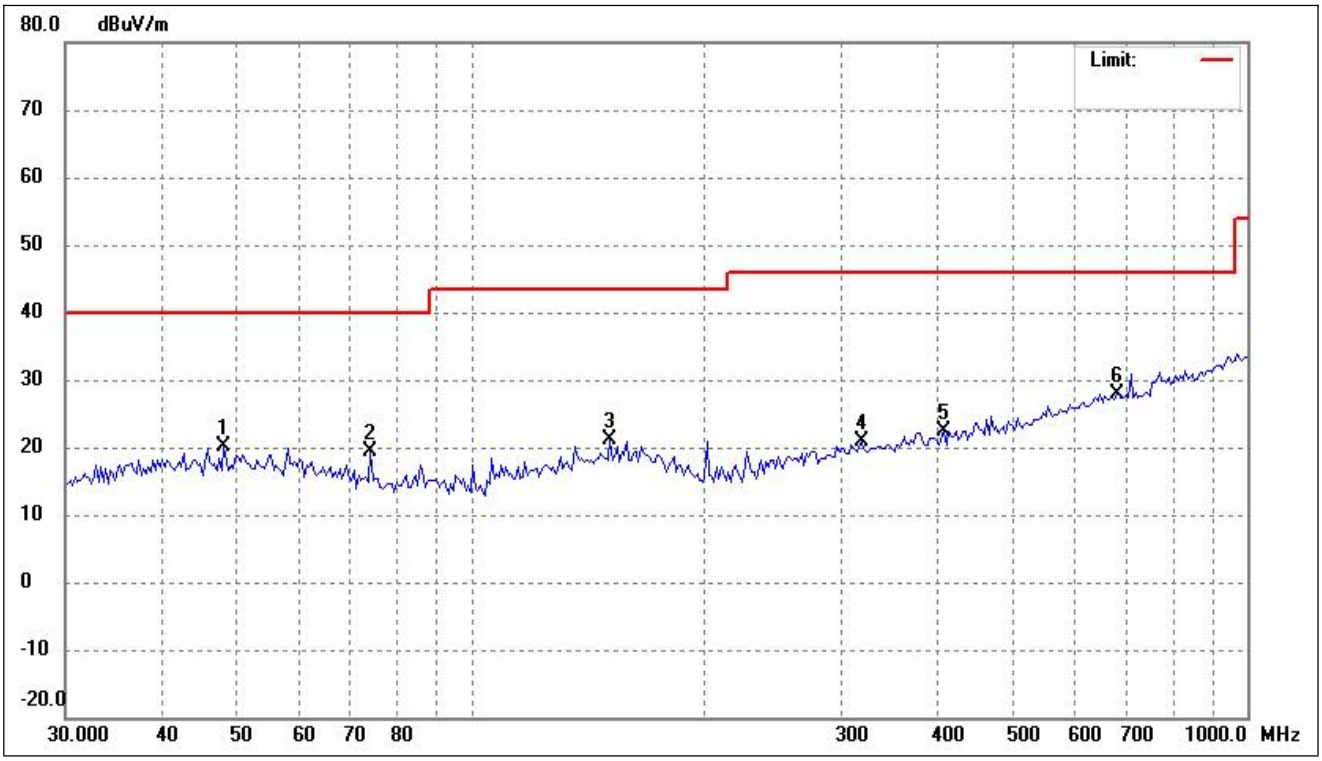
No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	46.7077	27.76	-7.83	19.93	40.00	-20.07	-	-	peak
2	74.2696	30.61	-11.18	19.43	40.00	-20.57	-	-	peak
3	171.3890	28.39	-8.51	19.88	43.50	-23.62	-	-	peak
4	290.3170	29.35	-8.16	21.19	46.00	-24.81	-	-	peak
5	542.6104	30.74	-3.78	26.96	46.00	-19.04	-	-	peak
6	925.6132	30.31	2.72	33.03	46.00	-12.97	-	-	peak

802.11n-HT20			
Test Channel	5500MHz(worst case)	Polarity:	Horizontal



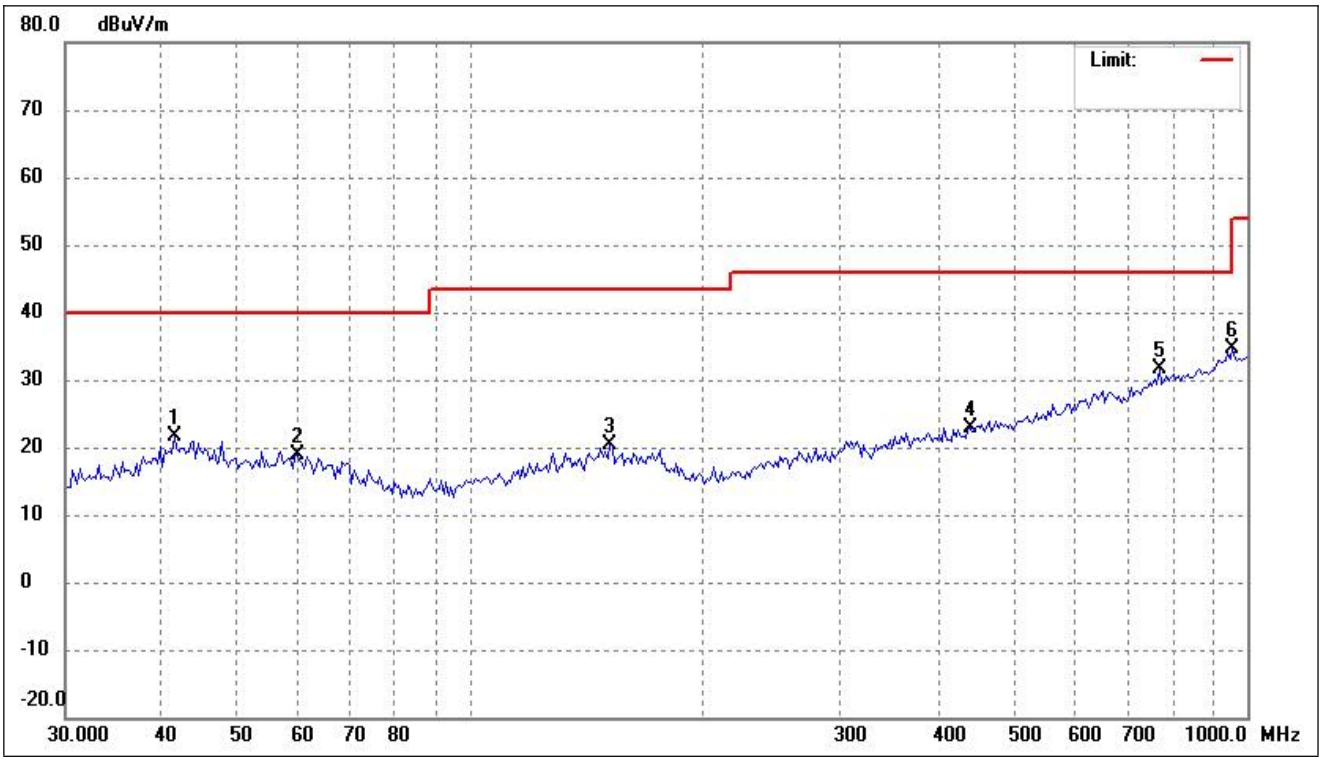
No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	41.4483	28.69	-7.96	20.73	40.00	-19.27	-	-	peak
2	66.8395	26.17	-9.67	16.50	40.00	-23.50	-	-	peak
3	152.0902	28.65	-8.05	20.60	43.50	-22.90	-	-	peak
4	427.2920	28.81	-5.68	23.13	46.00	-22.87	-	-	peak
5	646.8217	29.66	-1.59	28.07	46.00	-17.93	-	-	peak
6	919.1315	31.03	2.55	33.58	46.00	-12.42	-	-	peak

802.11n-HT20			
Test Channel	5500MHz(worst case)	Polarity:	Vertical



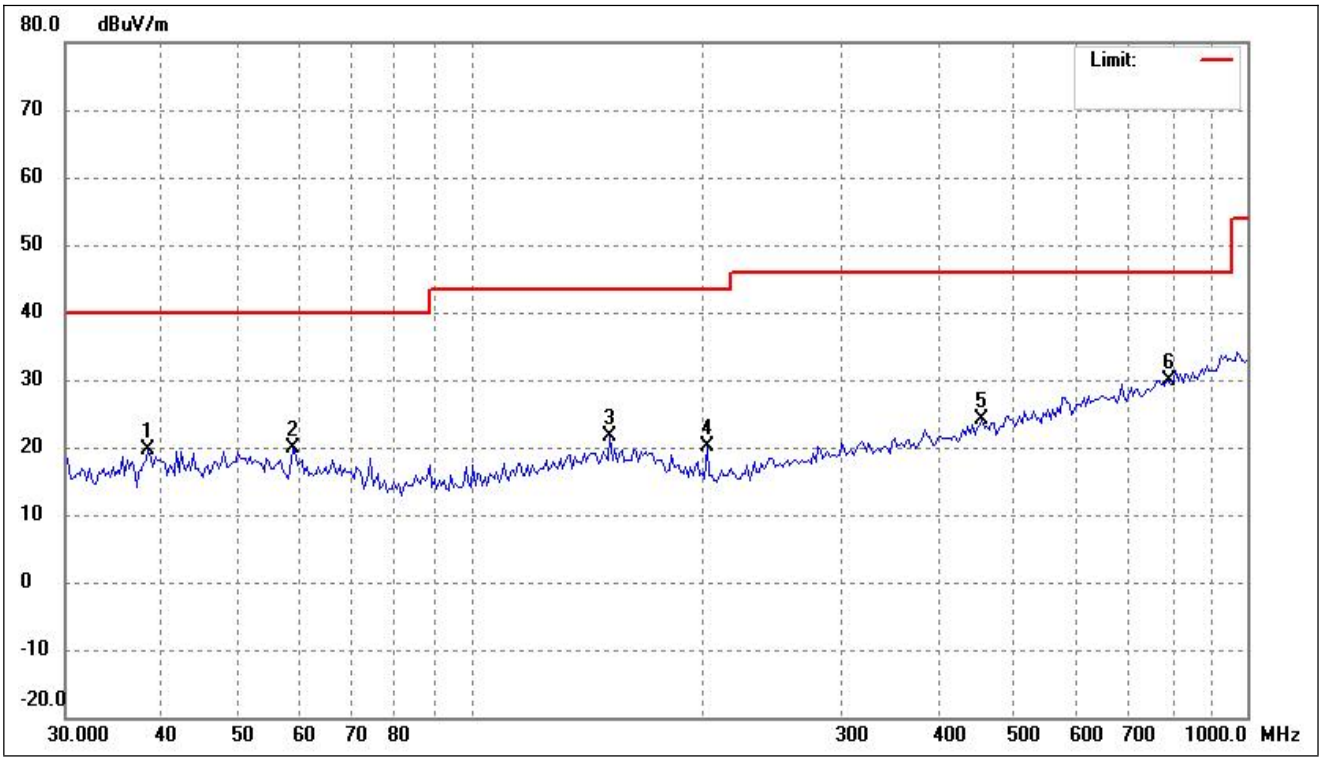
No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	48.0392	27.89	-7.73	20.16	40.00	-19.84	-	-	peak
2	74.2696	30.50	-11.18	19.32	40.00	-20.68	-	-	peak
3	151.0252	29.10	-8.05	21.05	43.50	-22.45	-	-	peak
4	318.0875	28.42	-7.47	20.95	46.00	-25.05	-	-	peak
5	406.7820	28.50	-6.12	22.38	46.00	-23.62	-	-	peak
6	679.4346	29.23	-1.33	27.90	46.00	-18.10	-	-	peak

802.11ac-VHT20			
Test Channel	5500MHz(worst case)	Polarity:	Horizontal



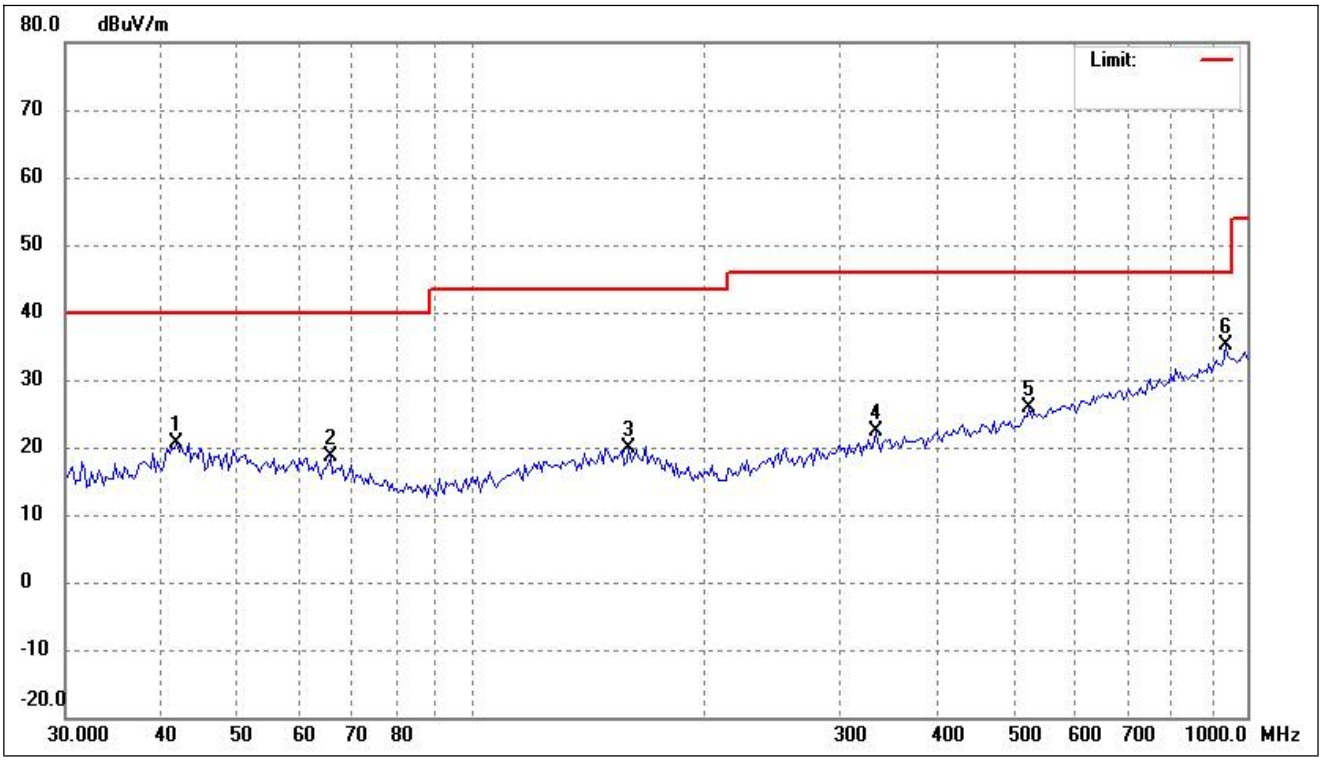
No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	41.4483	29.60	-7.96	21.64	40.00	-18.36	-	-	peak
2	59.7315	27.19	-8.41	18.78	40.00	-21.22	-	-	peak
3	151.0252	28.40	-8.05	20.35	43.50	-23.15	-	-	peak
4	439.4730	28.24	-5.42	22.82	46.00	-23.18	-	-	peak
5	771.0475	30.98	0.53	31.51	46.00	-14.49	-	-	peak
6	958.7135	31.22	3.34	34.56	46.00	-11.44	-	-	peak

802.11ac-VHT20			
Test Channel	5500MHz(worst case)	Polarity:	Vertical



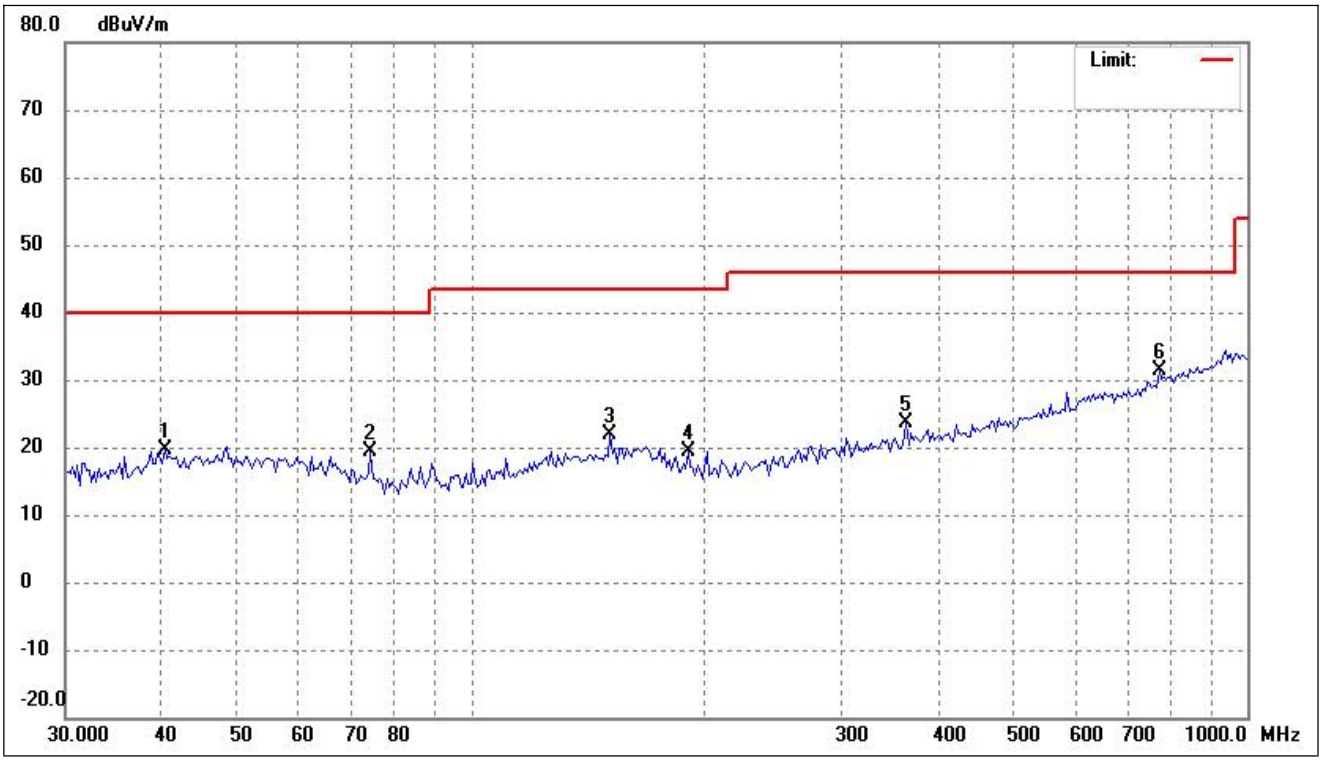
No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	38.3651	27.96	-8.30	19.66	40.00	-20.34	-	-	peak
2	58.8979	28.24	-8.36	19.88	40.00	-20.12	-	-	peak
3	151.0252	29.79	-8.05	21.74	43.50	-21.76	-	-	peak
4	201.4539	31.61	-11.42	20.19	43.50	-23.31	-	-	peak
5	455.1888	29.40	-5.15	24.25	46.00	-21.75	-	-	peak
6	793.0281	29.09	0.88	29.97	46.00	-16.03	-	-	peak

802.11n-HT40			
Test Channel	5510MHz(worst case)	Polarity:	Horizontal



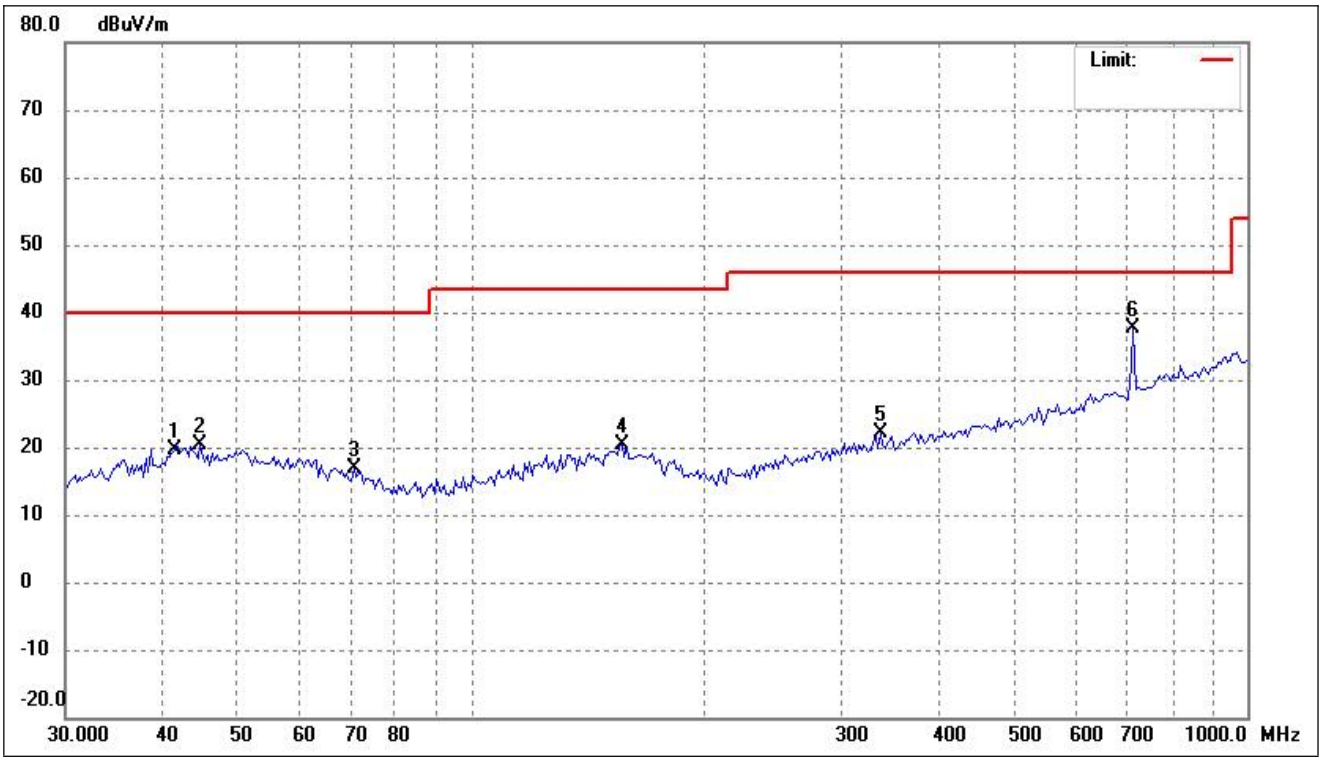
No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	41.7406	28.70	-7.95	20.75	40.00	-19.25	-	-	peak
2	65.9067	28.04	-9.51	18.53	40.00	-21.47	-	-	peak
3	159.7586	27.94	-8.05	19.89	43.50	-23.61	-	-	peak
4	331.7858	29.53	-7.25	22.28	46.00	-23.72	-	-	peak
5	523.8763	30.27	-4.34	25.93	46.00	-20.07	-	-	peak
6	938.7139	32.13	3.03	35.16	46.00	-10.84	-	-	peak

802.11n-HT40			
Test Channel	5510MHz(worst case)	Polarity:	Vertical



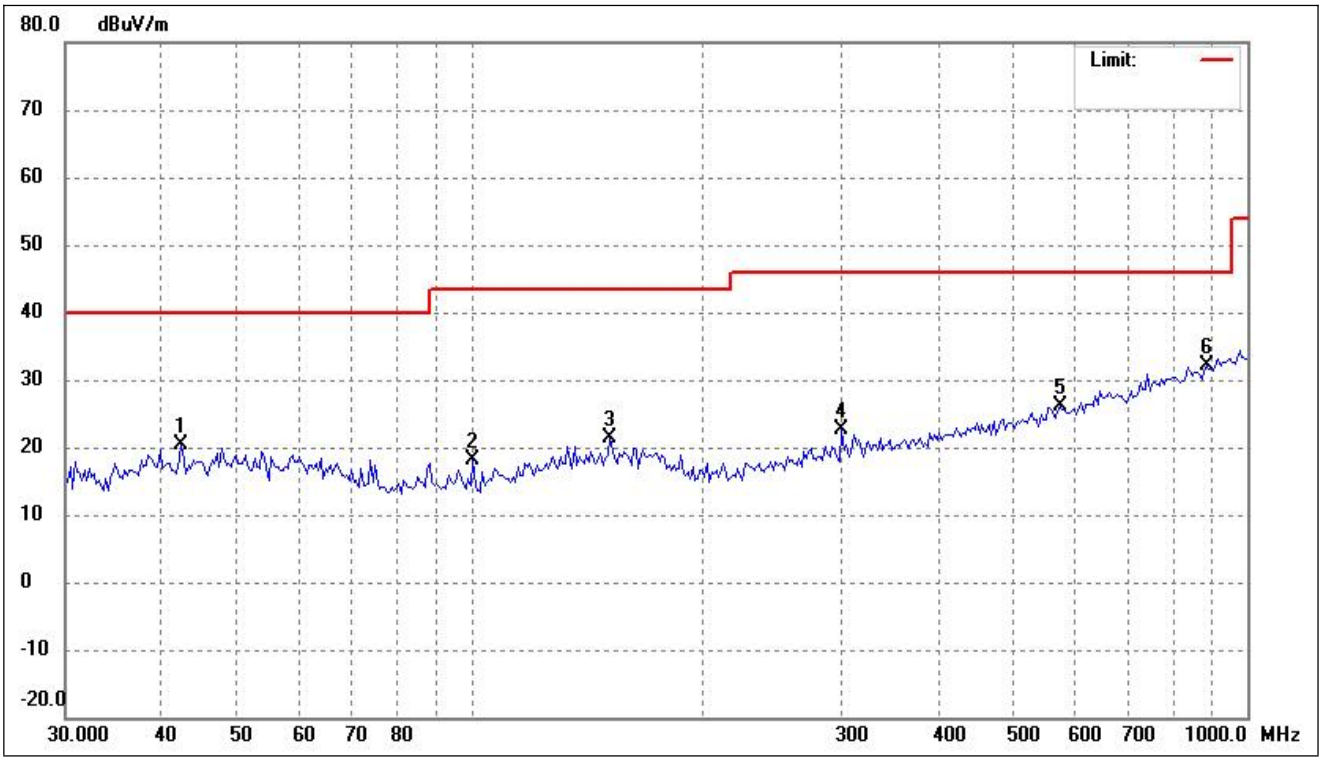
No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	40.2995	27.65	-7.96	19.69	40.00	-20.31	-	-	peak
2	74.2696	30.52	-11.18	19.34	40.00	-20.66	-	-	peak
3	151.0252	29.93	-8.05	21.88	43.50	-21.62	-	-	peak
4	190.4411	30.29	-10.86	19.43	43.50	-24.07	-	-	peak
5	363.5231	30.43	-6.81	23.62	46.00	-22.38	-	-	peak
6	771.0475	30.77	0.53	31.30	46.00	-14.70	-	-	peak

802.11ac-VHT40			
Test Channel	5510MHz(worst case)	Polarity:	Horizontal



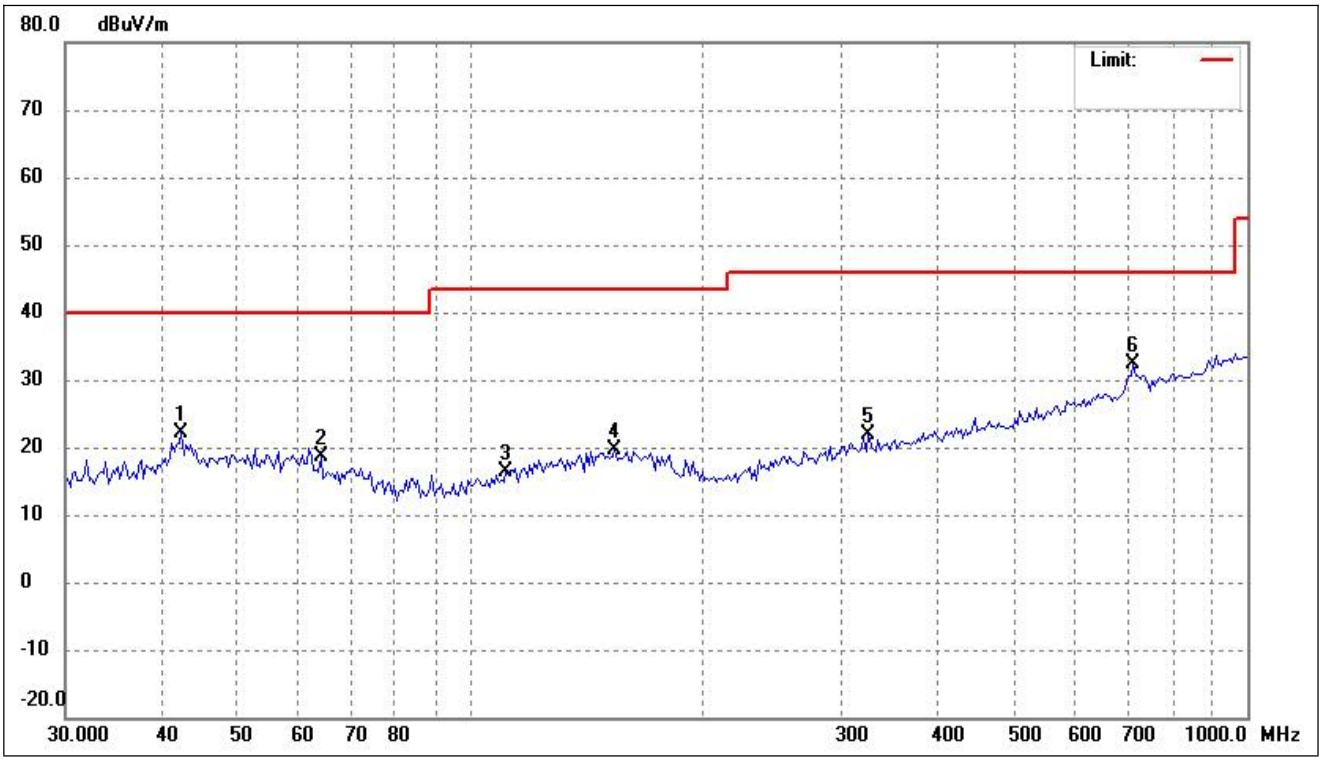
No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	41.4483	27.67	-7.96	19.71	40.00	-20.29	-	-	peak
2	44.7793	28.23	-7.96	20.27	40.00	-19.73	-	-	peak
3	70.7047	27.23	-10.41	16.82	40.00	-23.18	-	-	peak
4	156.4259	28.50	-8.05	20.45	43.50	-23.05	-	-	peak
5	336.4817	29.36	-7.20	22.16	46.00	-23.84	-	-	peak
6	713.6917	38.39	-0.75	37.64	46.00	-8.36	-	-	peak

802.11ac-VHT40			
Test Channel	5510MHz(worst case)	Polarity:	Vertical



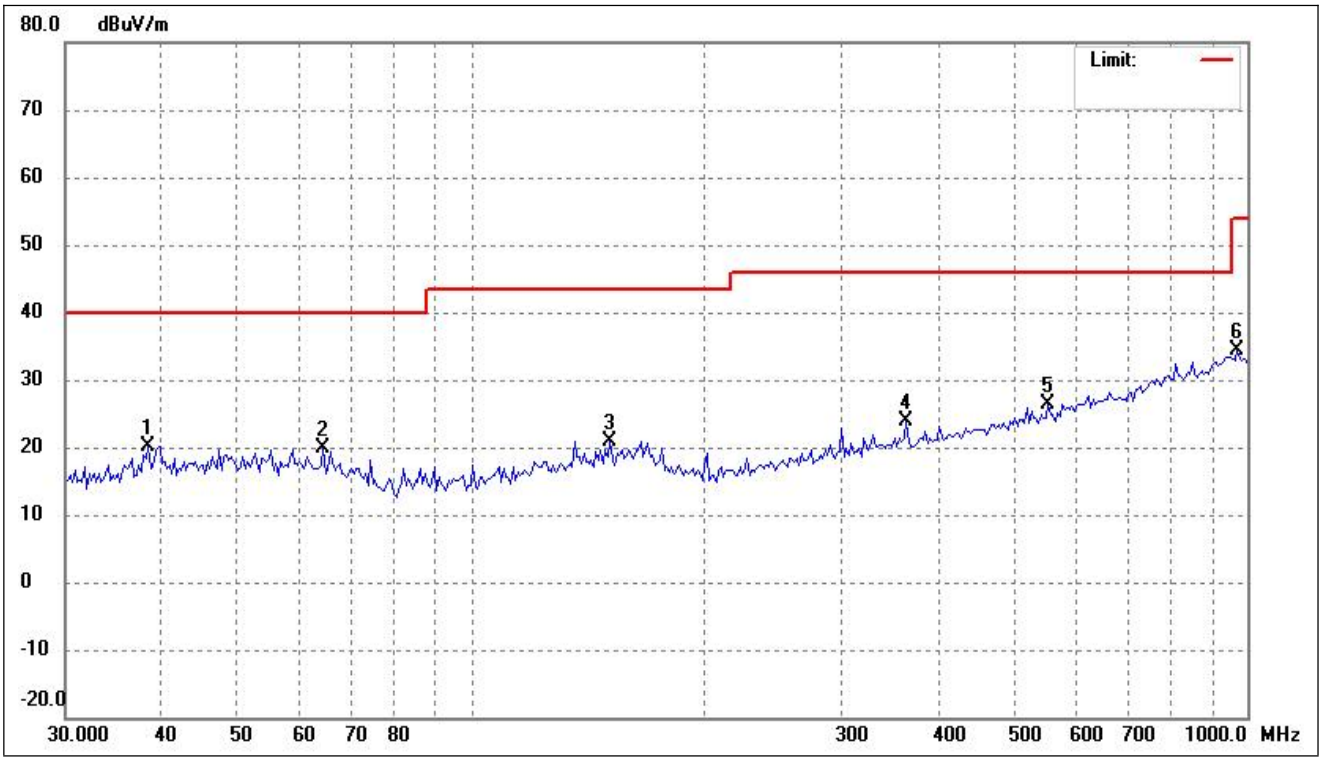
No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	42.3314	28.40	-7.96	20.44	40.00	-19.56	-	-	peak
2	100.4712	30.09	-11.95	18.14	43.50	-25.36	-	-	peak
3	151.0252	29.32	-8.05	21.27	43.50	-22.23	-	-	peak
4	300.6988	30.41	-7.85	22.56	46.00	-23.44	-	-	peak
5	573.9882	28.95	-2.88	26.07	46.00	-19.93	-	-	peak
6	887.3978	30.14	1.95	32.09	46.00	-13.91	-	-	peak

802.11ac-VHT80			
Test Channel	5530MHz(worst case)	Polarity:	Horizontal



No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	42.3314	30.11	-7.96	22.15	40.00	-17.85	-	-	peak
2	64.0800	27.83	-9.17	18.66	40.00	-21.34	-	-	peak
3	110.8581	27.37	-10.98	16.39	43.50	-27.11	-	-	peak
4	153.1627	27.73	-8.05	19.68	43.50	-23.82	-	-	peak
5	324.8645	29.09	-7.33	21.76	46.00	-24.24	-	-	peak
6	713.6917	33.18	-0.75	32.43	46.00	-13.57	-	-	peak

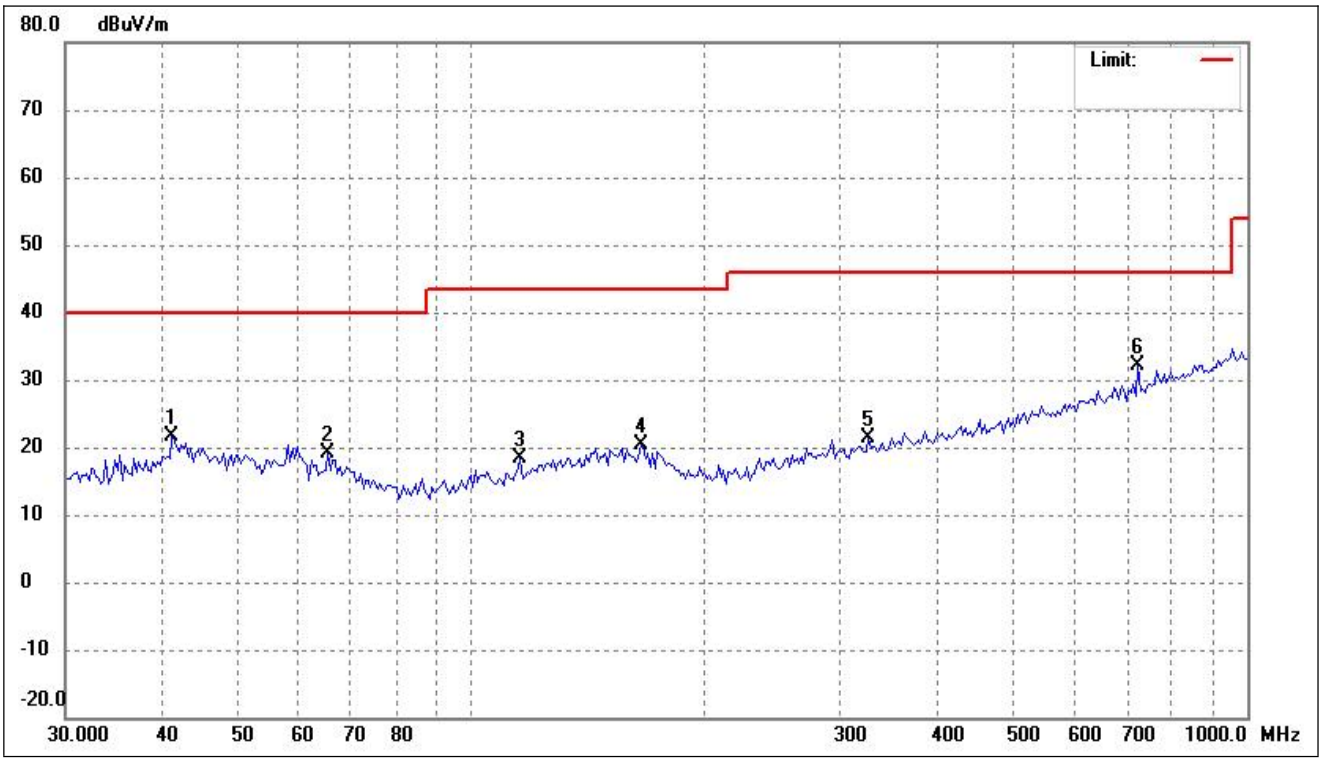
802.11ac-VHT80			
Test Channel	5530MHz(worst case)	Polarity:	Vertical



No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	38.3651	28.39	-8.30	20.09	40.00	-19.91	-	-	peak
2	64.5319	29.16	-9.25	19.91	40.00	-20.09	-	-	peak
3	151.0252	29.00	-8.05	20.95	43.50	-22.55	-	-	peak
4	363.5231	30.63	-6.81	23.82	46.00	-22.18	-	-	peak
5	554.1708	29.91	-3.43	26.48	46.00	-19.52	-	-	peak
6	972.2827	30.90	3.39	34.29	54.00	-19.71	-	-	peak

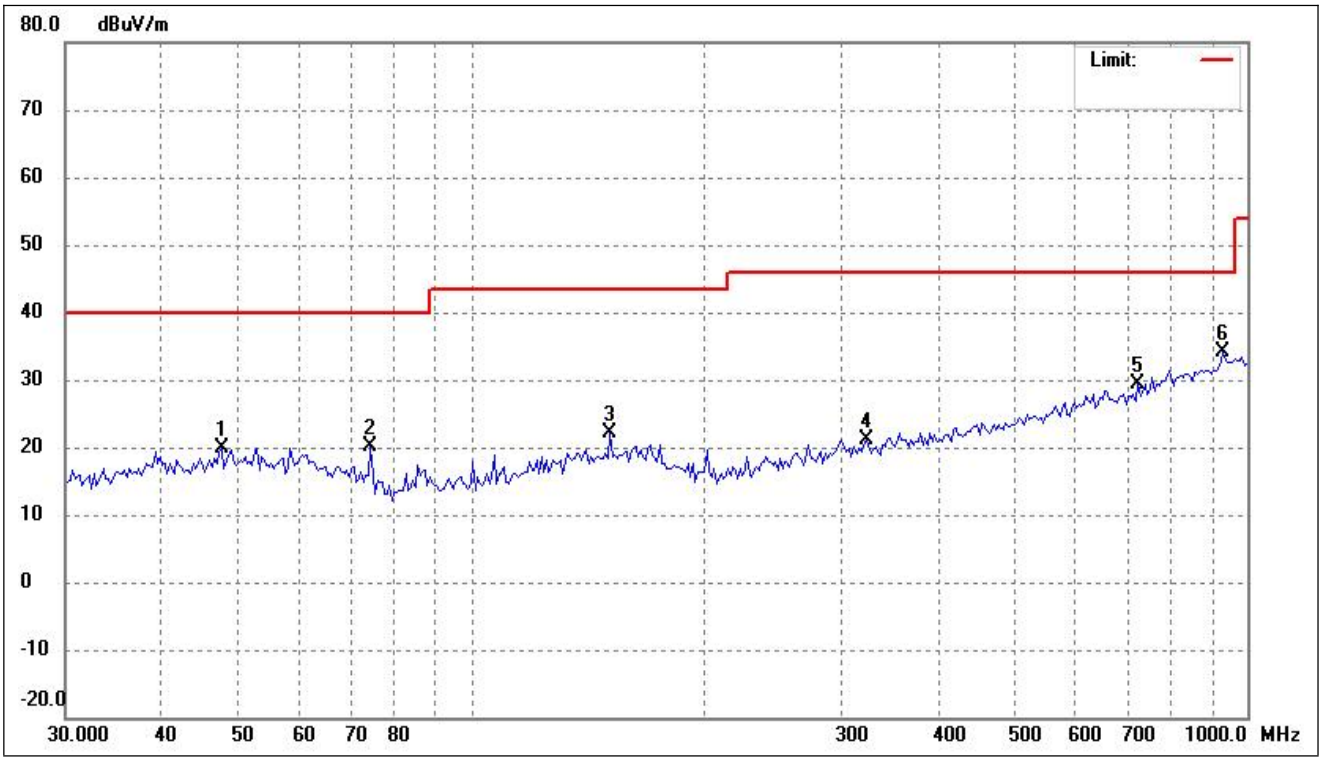
➢ 5725-5850MHz

802.11a			
Test Channel	5745MHz(worst case)	Polarity:	Horizontal



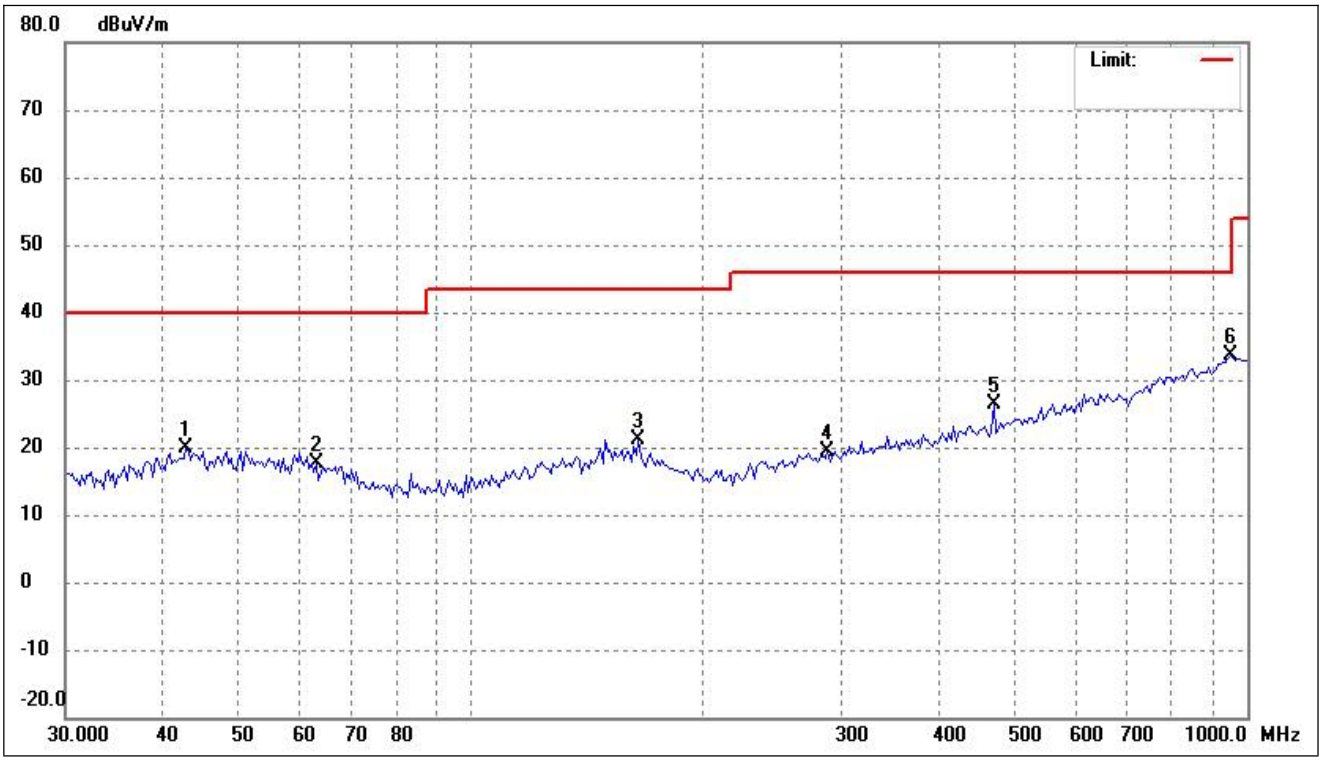
No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	41.1581	29.50	-7.96	21.54	40.00	-18.46	-	-	peak
2	65.4452	28.53	-9.42	19.11	40.00	-20.89	-	-	peak
3	115.6322	28.88	-10.47	18.41	43.50	-25.09	-	-	peak
4	165.4716	28.47	-8.19	20.28	43.50	-23.22	-	-	peak
5	324.8645	28.67	-7.33	21.34	46.00	-24.66	-	-	peak
6	723.7930	32.71	-0.49	32.22	46.00	-13.78	-	-	peak

802.11a			
Test Channel	5745MHz(worst case)	Polarity:	Vertical



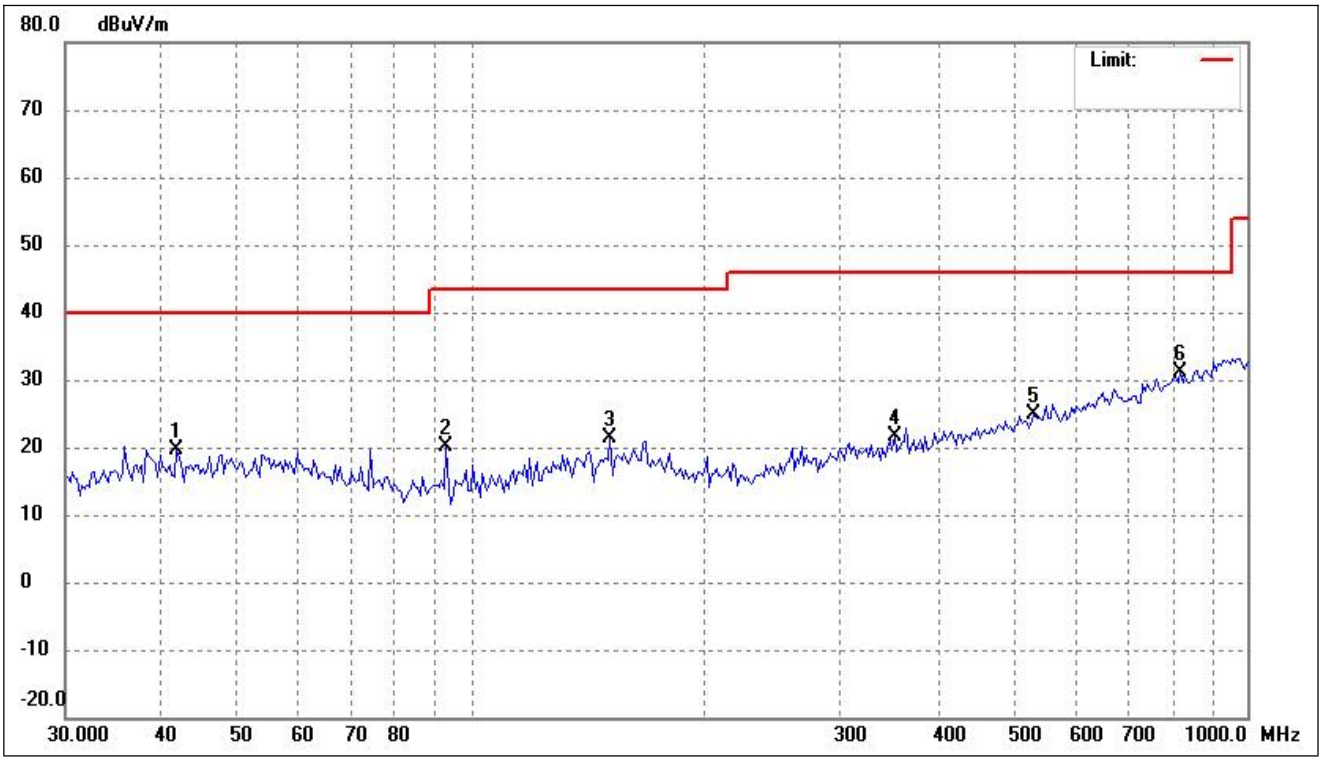
No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	47.7028	27.70	-7.76	19.94	40.00	-20.06	-	-	peak
2	74.2696	31.20	-11.18	20.02	40.00	-19.98	-	-	peak
3	151.0252	30.18	-8.05	22.13	43.50	-21.37	-	-	peak
4	322.5896	28.51	-7.38	21.13	46.00	-24.87	-	-	peak
5	723.7930	29.96	-0.49	29.47	46.00	-16.53	-	-	peak
6	932.1405	31.32	2.87	34.19	46.00	-11.81	-	-	peak

802.11n-HT20			
Test Channel	5745MHz(worst case)	Polarity:	Horizontal



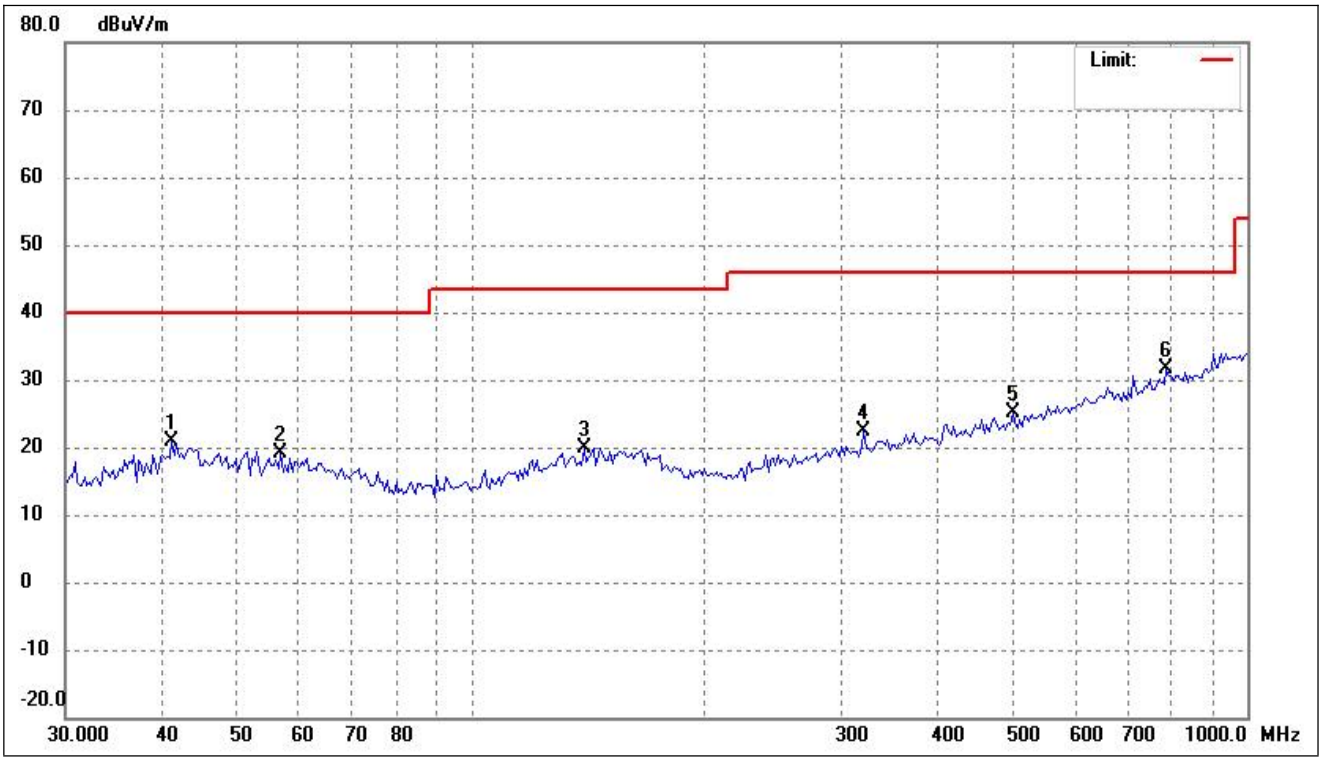
No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	42.9305	27.91	-7.96	19.95	40.00	-20.05	-	-	peak
2	63.1857	26.66	-9.01	17.65	40.00	-22.35	-	-	peak
3	164.3129	29.17	-8.16	21.01	43.50	-22.49	-	-	peak
4	288.2840	27.68	-8.23	19.45	46.00	-26.55	-	-	peak
5	471.4665	31.30	-5.02	26.28	46.00	-19.72	-	-	peak
6	952.0001	30.20	3.31	33.51	46.00	-12.49	-	-	peak

802.11n-HT20			
Test Channel	5745MHz(worst case)	Polarity:	Vertical



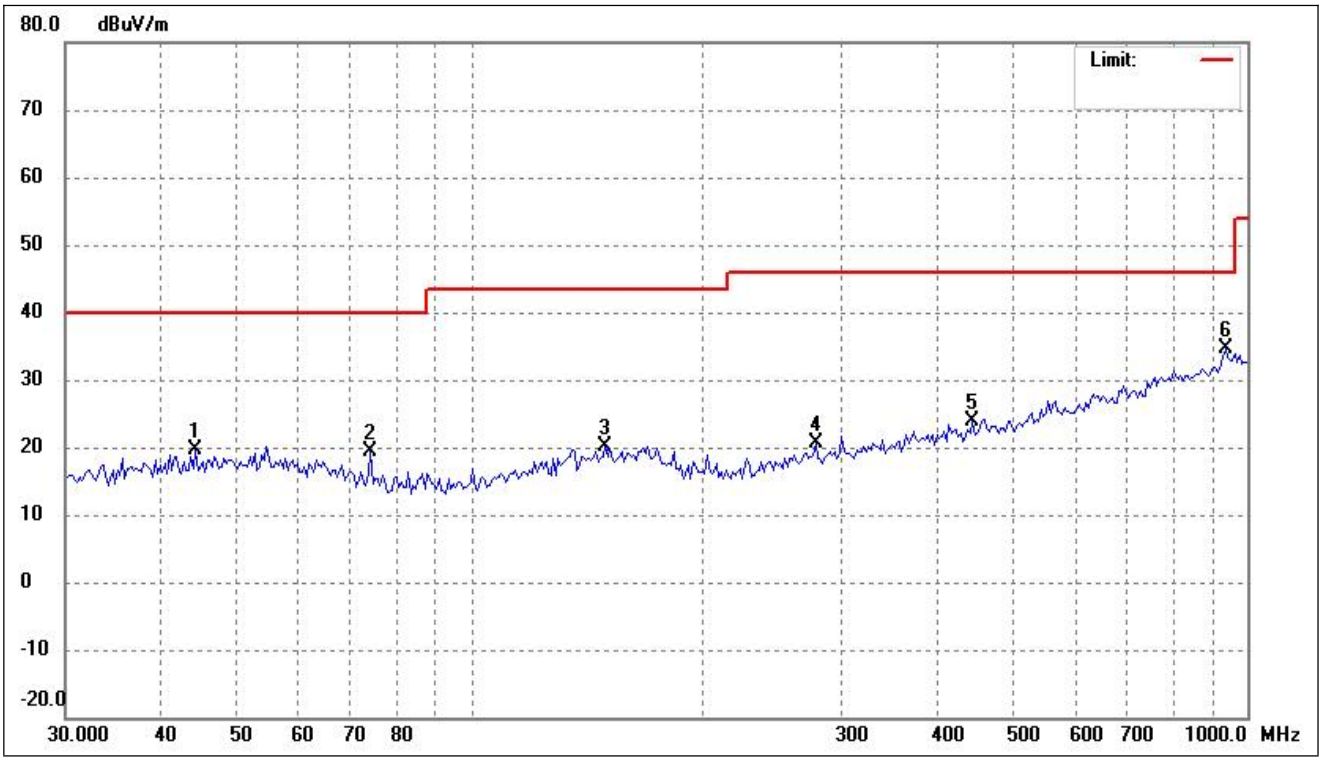
No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	41.7406	27.66	-7.95	19.71	40.00	-20.29	-	-	peak
2	92.9974	32.43	-12.42	20.01	43.50	-23.49	-	-	peak
3	151.0252	29.43	-8.05	21.38	43.50	-22.12	-	-	peak
4	350.9722	28.69	-7.05	21.64	46.00	-24.36	-	-	peak
5	531.2910	28.91	-4.12	24.79	46.00	-21.21	-	-	peak
6	821.3871	29.80	1.23	31.03	46.00	-14.97	-	-	peak

802.11ac-VHT20			
Test Channel	5745MHz(worst case)	Polarity:	Horizontal



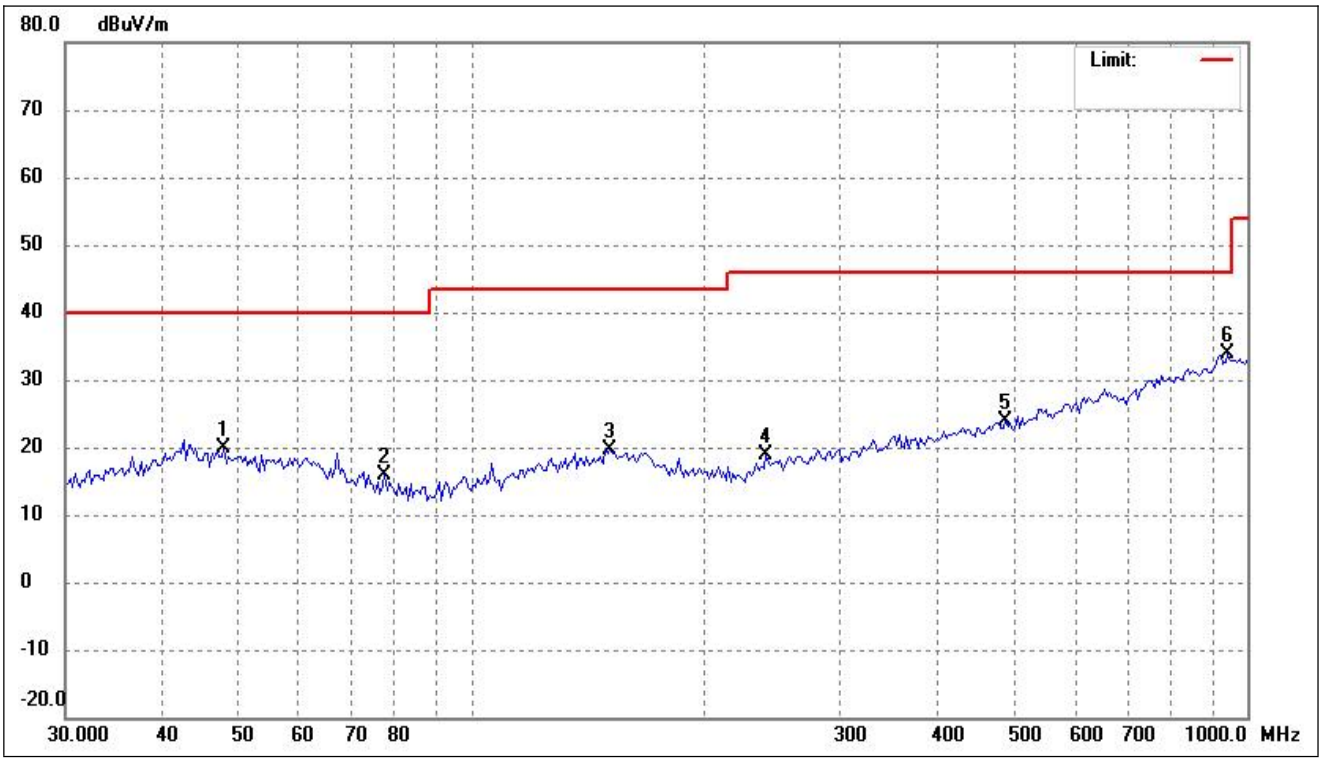
No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	41.1581	28.91	-7.96	20.95	40.00	-19.05	-	-	peak
2	56.8644	27.31	-8.24	19.07	40.00	-20.93	-	-	peak
3	139.7909	28.87	-8.90	19.97	43.50	-23.53	-	-	peak
4	320.3306	29.79	-7.42	22.37	46.00	-23.63	-	-	peak
5	498.7303	30.05	-4.82	25.23	46.00	-20.77	-	-	peak
6	787.4749	30.81	0.80	31.61	46.00	-14.39	-	-	peak

802.11ac-VHT20			
Test Channel	5745MHz(worst case)	Polarity:	Vertical



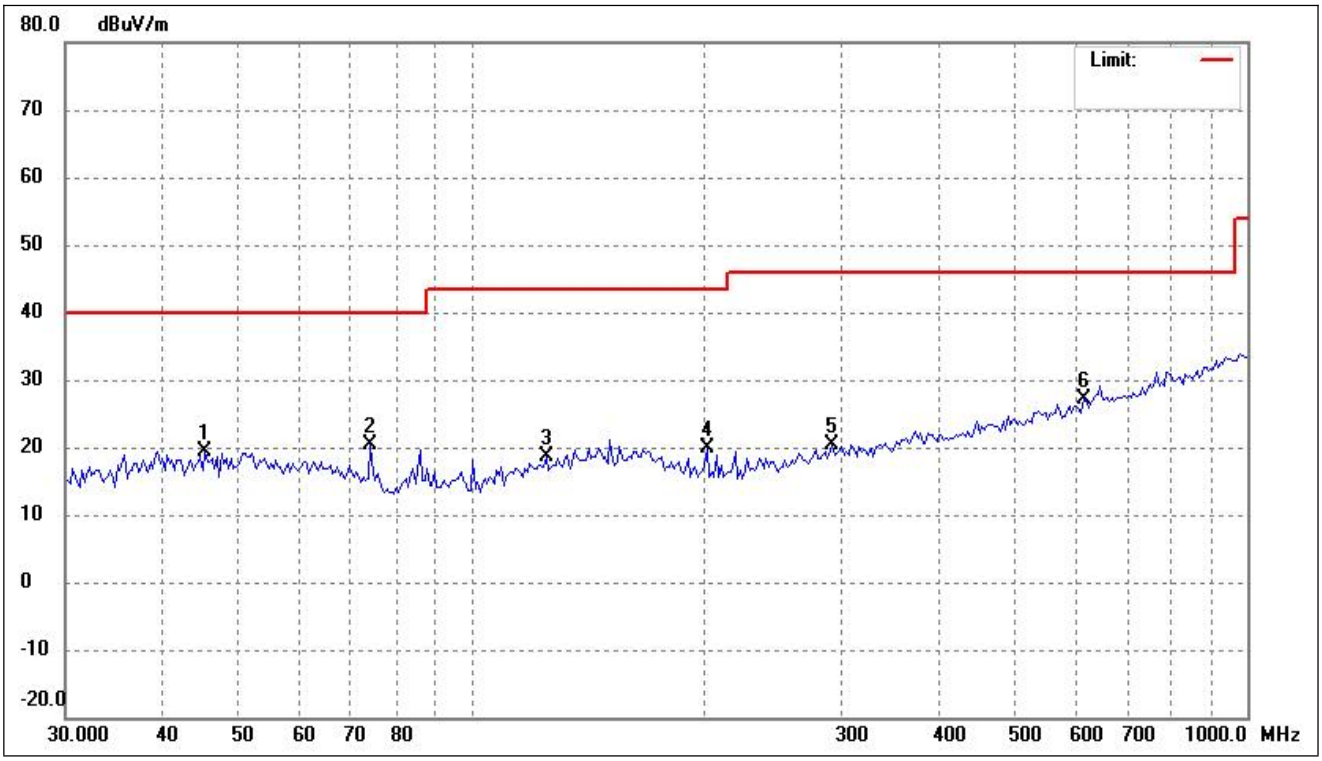
No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	44.1544	27.47	-7.96	19.51	40.00	-20.49	-	-	peak
2	74.2696	30.58	-11.18	19.40	40.00	-20.60	-	-	peak
3	148.9175	28.27	-8.14	20.13	43.50	-23.37	-	-	peak
4	278.3308	29.27	-8.55	20.72	46.00	-25.28	-	-	peak
5	442.5722	29.34	-5.35	23.99	46.00	-22.01	-	-	peak
6	938.7139	31.49	3.03	34.52	46.00	-11.48	-	-	peak

802.11n-HT40			
Test Channel	5755MHz(worst case)	Polarity:	Horizontal



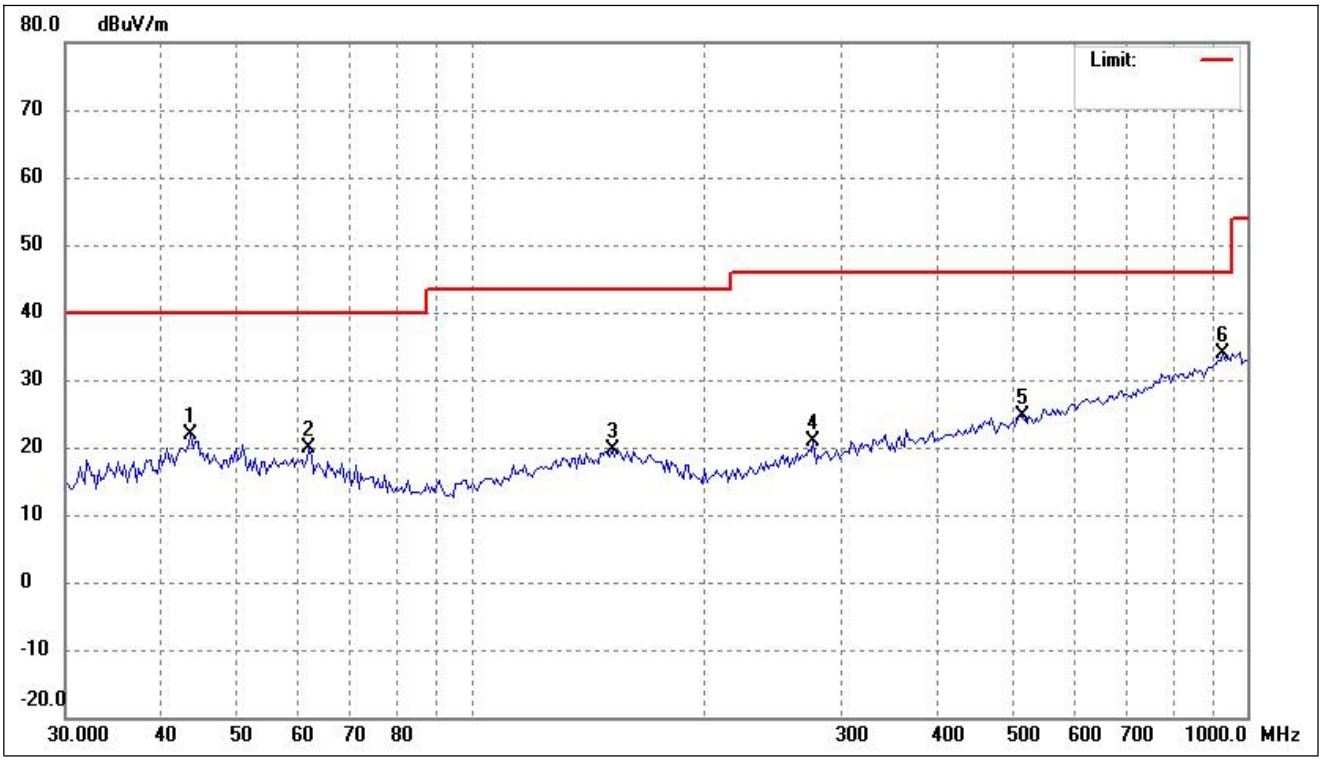
No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	48.0392	27.52	-7.73	19.79	40.00	-20.21	-	-	peak
2	77.4680	27.76	-11.89	15.87	40.00	-24.13	-	-	peak
3	151.0252	27.76	-8.05	19.71	43.50	-23.79	-	-	peak
4	240.1442	29.01	-10.02	18.99	46.00	-27.01	-	-	peak
5	488.3263	28.66	-4.90	23.76	46.00	-22.24	-	-	peak
6	945.3336	30.76	3.19	33.95	46.00	-12.05	-	-	peak

802.11n-HT40			
Test Channel	5755MHz(worst case)	Polarity:	Vertical



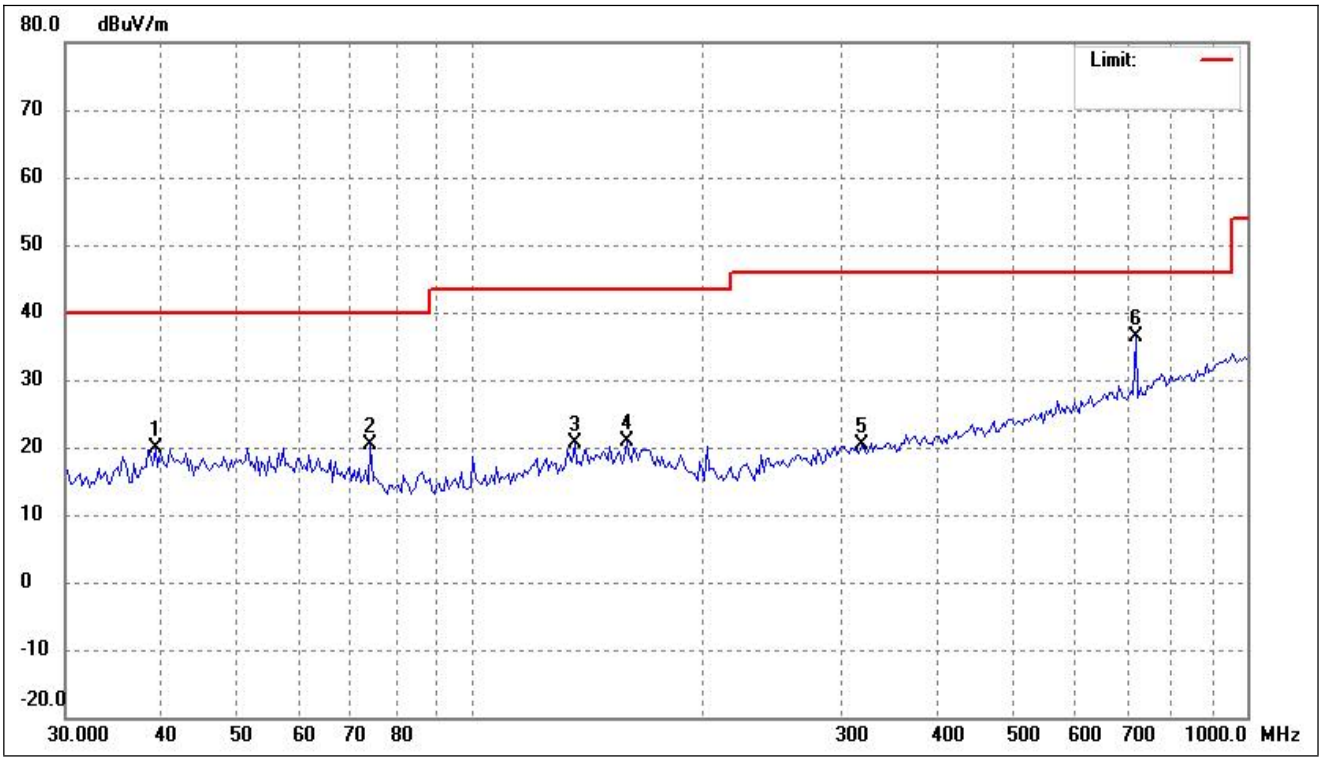
No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	45.4131	27.35	-7.92	19.43	40.00	-20.57	-	-	peak
2	74.2696	31.45	-11.18	20.27	40.00	-19.73	-	-	peak
3	124.9249	28.19	-9.67	18.52	43.50	-24.98	-	-	peak
4	201.4539	31.35	-11.42	19.93	43.50	-23.57	-	-	peak
5	292.3643	28.40	-8.11	20.29	46.00	-25.71	-	-	peak
6	615.7743	28.99	-1.96	27.03	46.00	-18.97	-	-	peak

802.11ac-VHT40			
Test Channel	5755MHz(worst case)	Polarity:	Horizontal



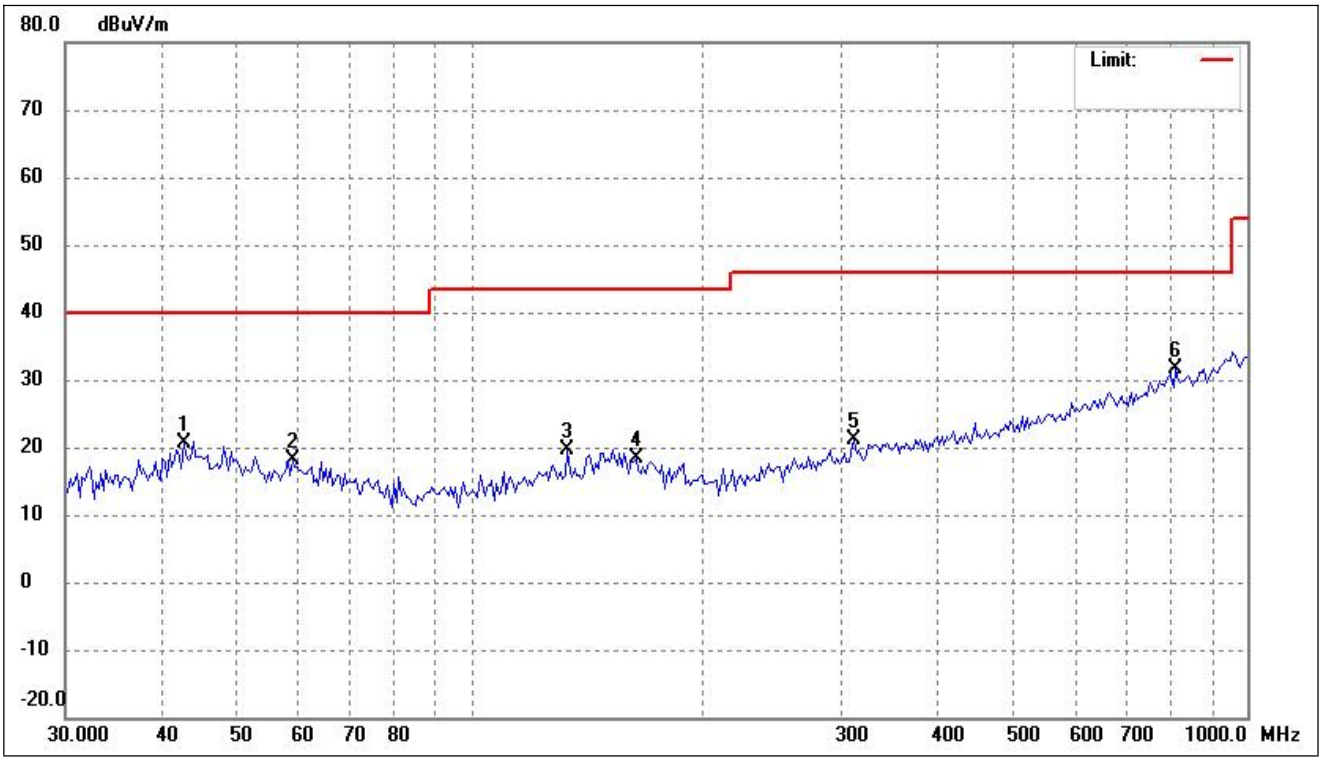
No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	43.5381	29.76	-7.95	21.81	40.00	-18.19	-	-	peak
2	61.8676	28.73	-8.77	19.96	40.00	-20.04	-	-	peak
3	152.0902	27.58	-8.05	19.53	43.50	-23.97	-	-	peak
4	276.3818	29.44	-8.62	20.82	46.00	-25.18	-	-	peak
5	509.3559	29.18	-4.63	24.55	46.00	-21.45	-	-	peak
6	932.1405	31.09	2.87	33.96	46.00	-12.04	-	-	peak

802.11ac-VHT40			
Test Channel	5755MHz(worst case)	Polarity:	Vertical



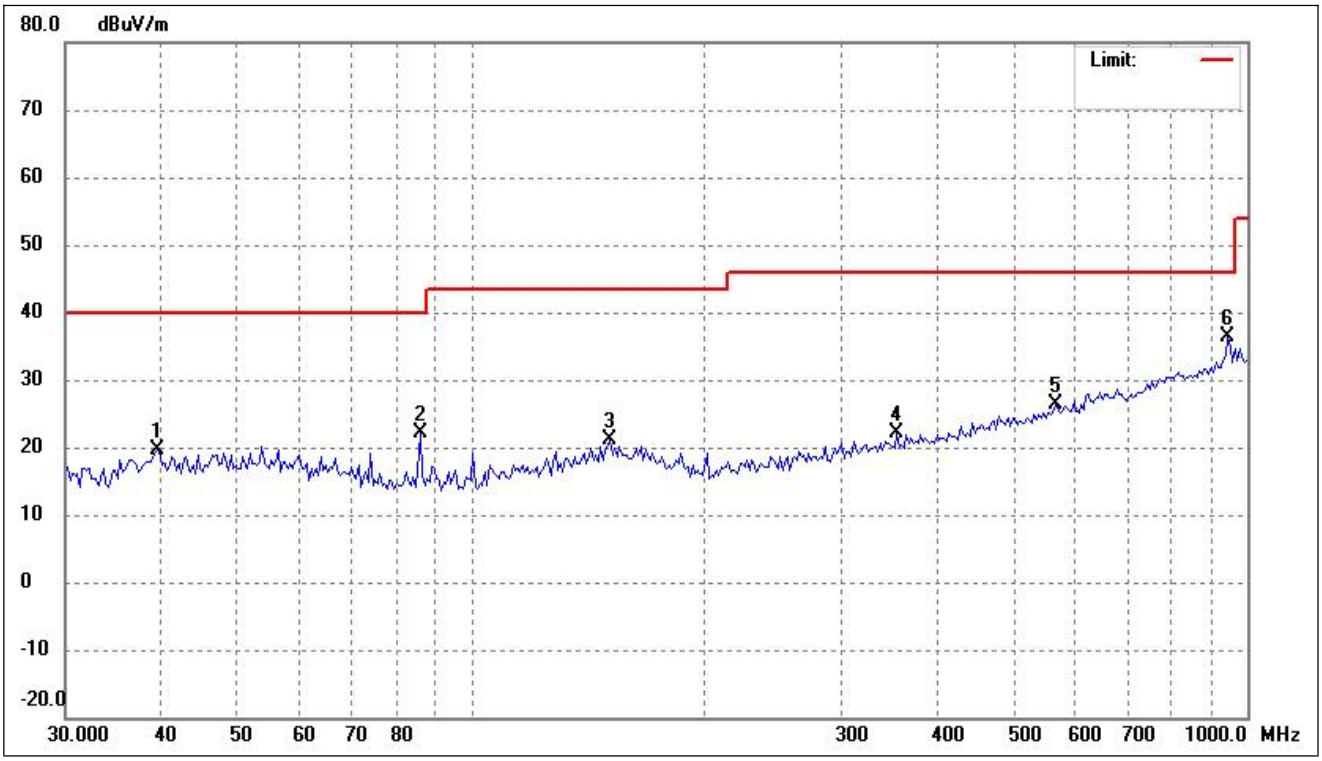
No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	39.1825	28.10	-8.12	19.98	40.00	-20.02	-	-	peak
2	74.2696	31.47	-11.18	20.29	40.00	-19.71	-	-	peak
3	135.9163	29.75	-9.07	20.68	43.50	-22.82	-	-	peak
4	158.6399	28.95	-8.05	20.90	43.50	-22.60	-	-	peak
5	318.0875	27.85	-7.47	20.38	46.00	-25.62	-	-	peak
6	718.7246	36.92	-0.62	36.30	46.00	-9.70	-	-	peak

802.11ac-VHT80			
Test Channel	5775MHz(worst case)	Polarity:	Horizontal



No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	42.6299	28.65	-7.96	20.69	40.00	-19.31	-	-	peak
2	58.8979	26.52	-8.36	18.16	40.00	-21.84	-	-	peak
3	133.0809	28.77	-9.18	19.59	43.50	-23.91	-	-	peak
4	163.1623	26.52	-8.13	18.39	43.50	-25.11	-	-	peak
5	311.4519	28.65	-7.61	21.04	46.00	-24.96	-	-	peak
6	809.9238	30.50	1.11	31.61	46.00	-14.39	-	-	peak

802.11ac-VHT80			
Test Channel	5775MHz(worst case)	Polarity:	Vertical

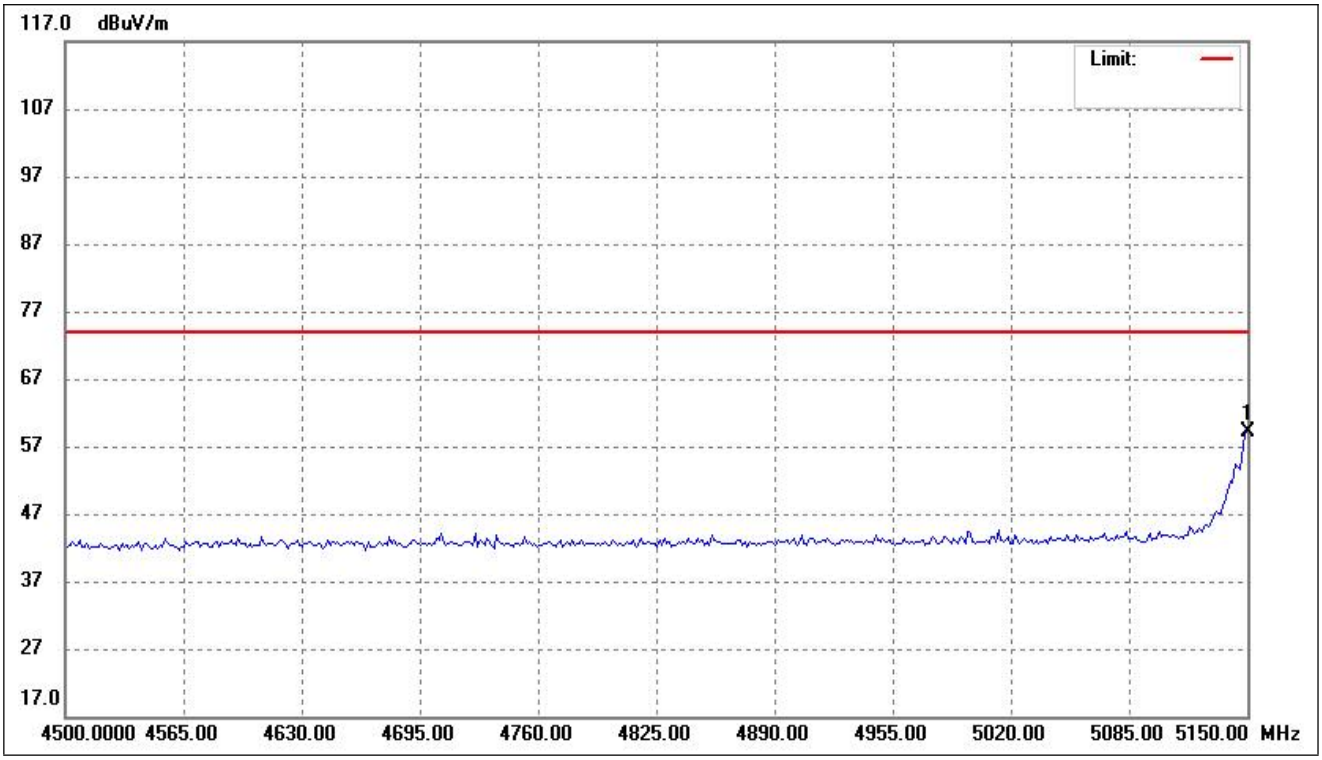


No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	39.4588	27.65	-8.07	19.58	40.00	-20.42	-	-	peak
2	86.0796	34.54	-12.53	22.01	40.00	-17.99	-	-	peak
3	151.0252	29.18	-8.05	21.13	43.50	-22.37	-	-	peak
4	353.4472	29.14	-7.00	22.14	46.00	-23.86	-	-	peak
5	565.9776	29.44	-3.10	26.34	46.00	-19.66	-	-	peak
6	945.3336	33.28	3.19	36.47	46.00	-9.53	-	-	peak

Remark: '-'Means' the test Degree and Height are not recorded by the test software and only show the worst case in the test report.

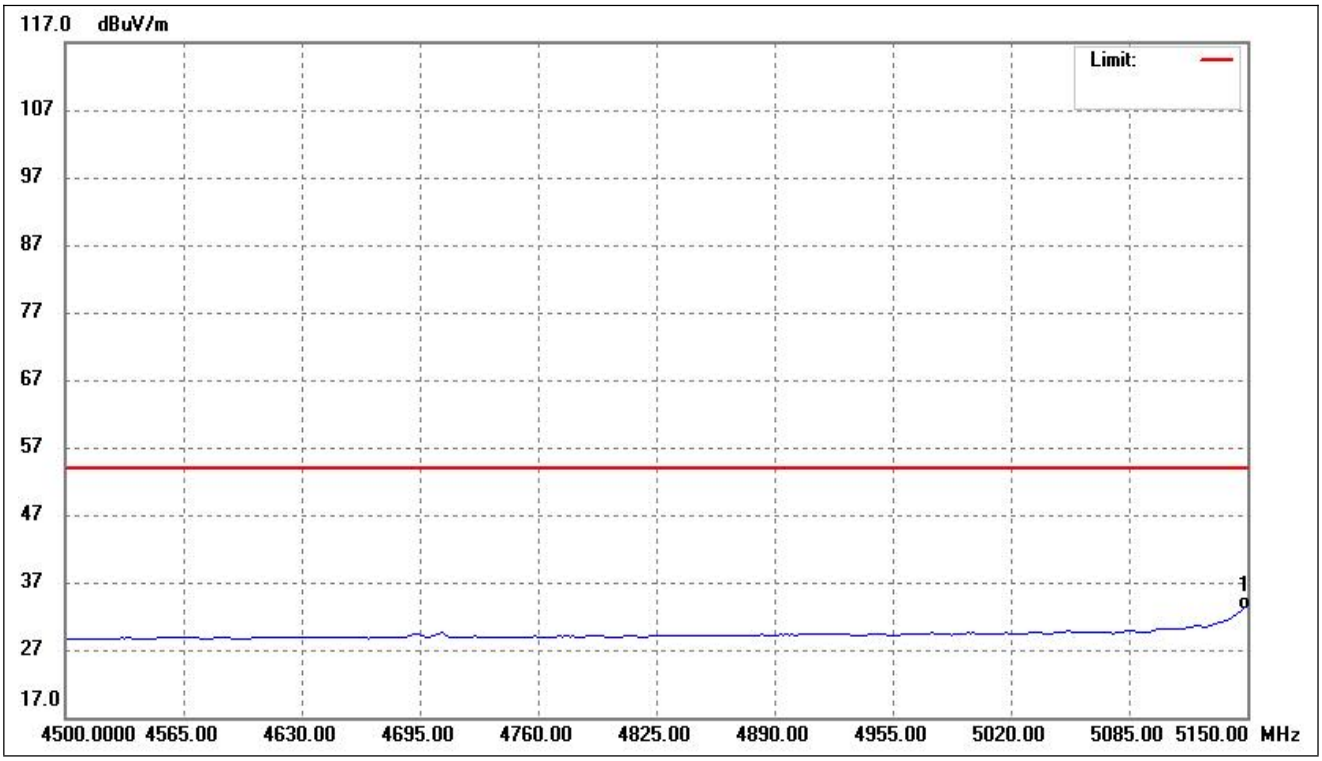
➢ Spurious Emission above 1GHz

802.11a- Restricted Bandedge			
Test Channel	band 5.15-5.25GHz	Polarity:	Horizontal(worst case)



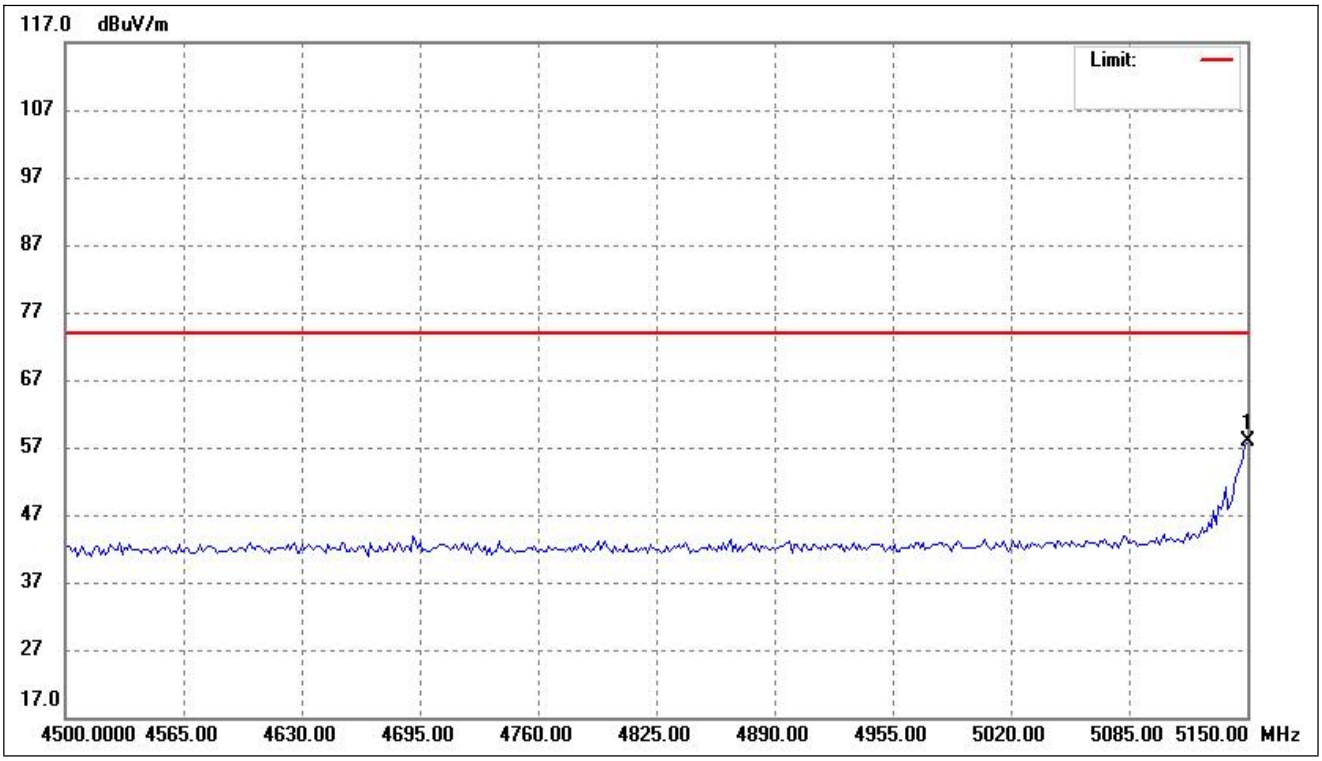
No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	5150.000	71.59	-12.53	59.06	74.00	-14.94	-	-	peak

802.11a- Restricted Bandedge			
Test Channel	band 5.15-5.25GHz	Polarity:	Horizontal(worst case)



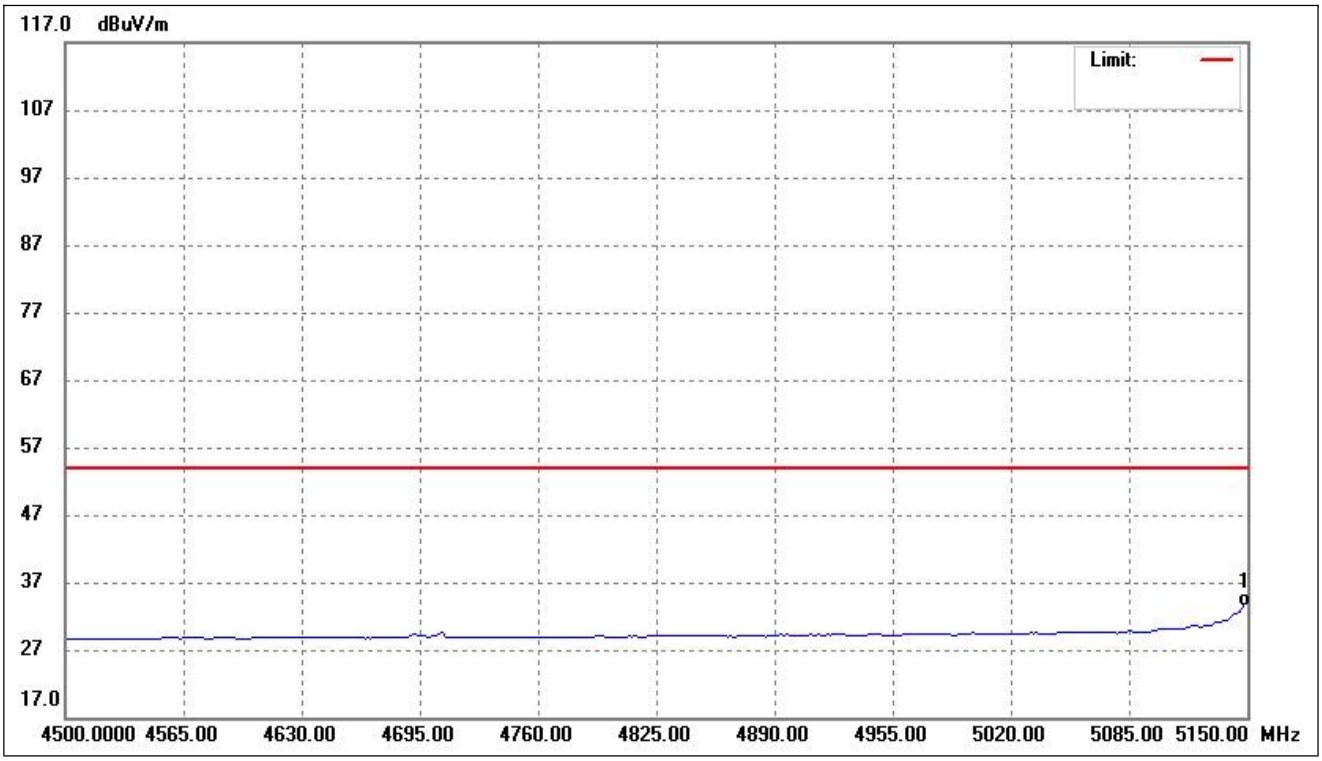
No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	5150.000	46.43	-12.53	33.90	54.00	-20.10	-	-	AVG

802.11n-HT20- Restricted Bandedge			
Test Channel	band 5.15-5.25GHz	Polarity:	Horizontal(worst case)



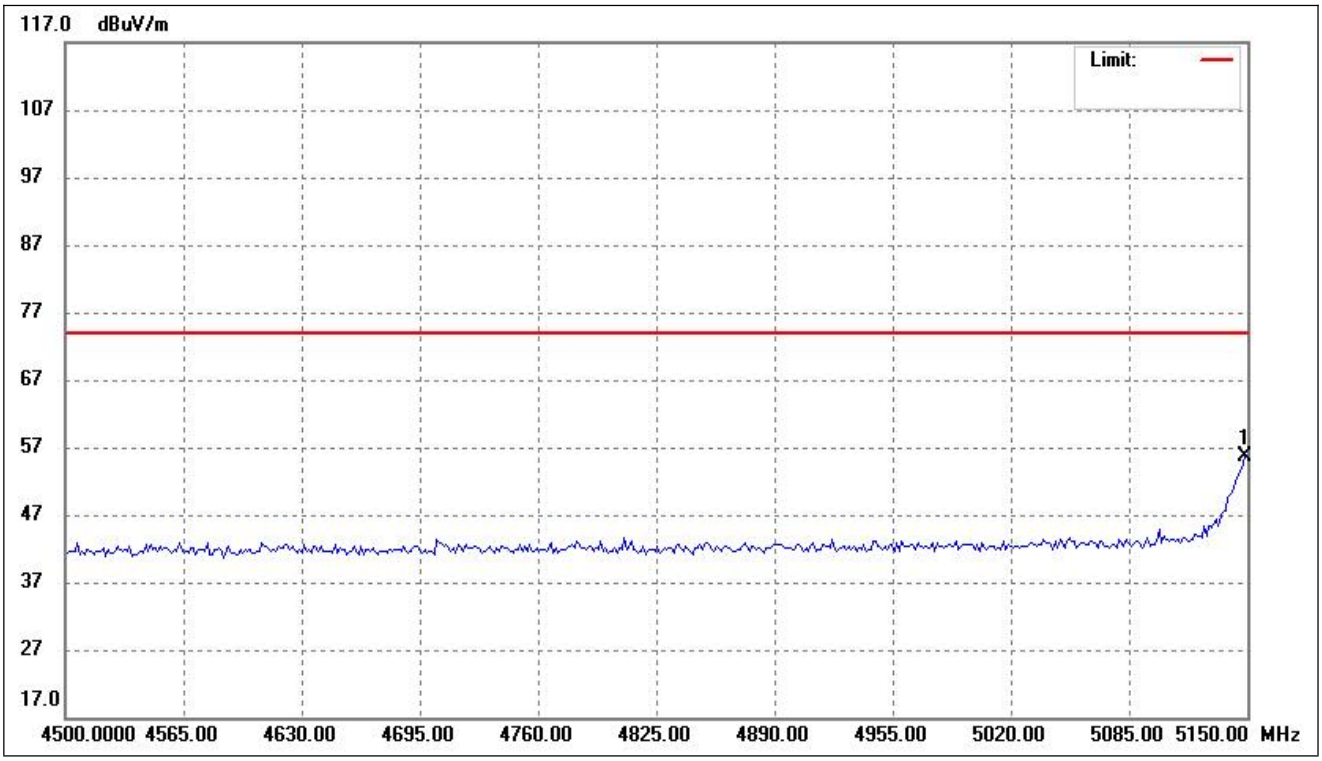
No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	5150.000	70.33	-12.53	57.80	74.00	-16.20	-	-	peak

802.11n-HT20- Restricted Bandedge			
Test Channel	band 5.15-5.25GHz	Polarity:	Horizontal(worst case)



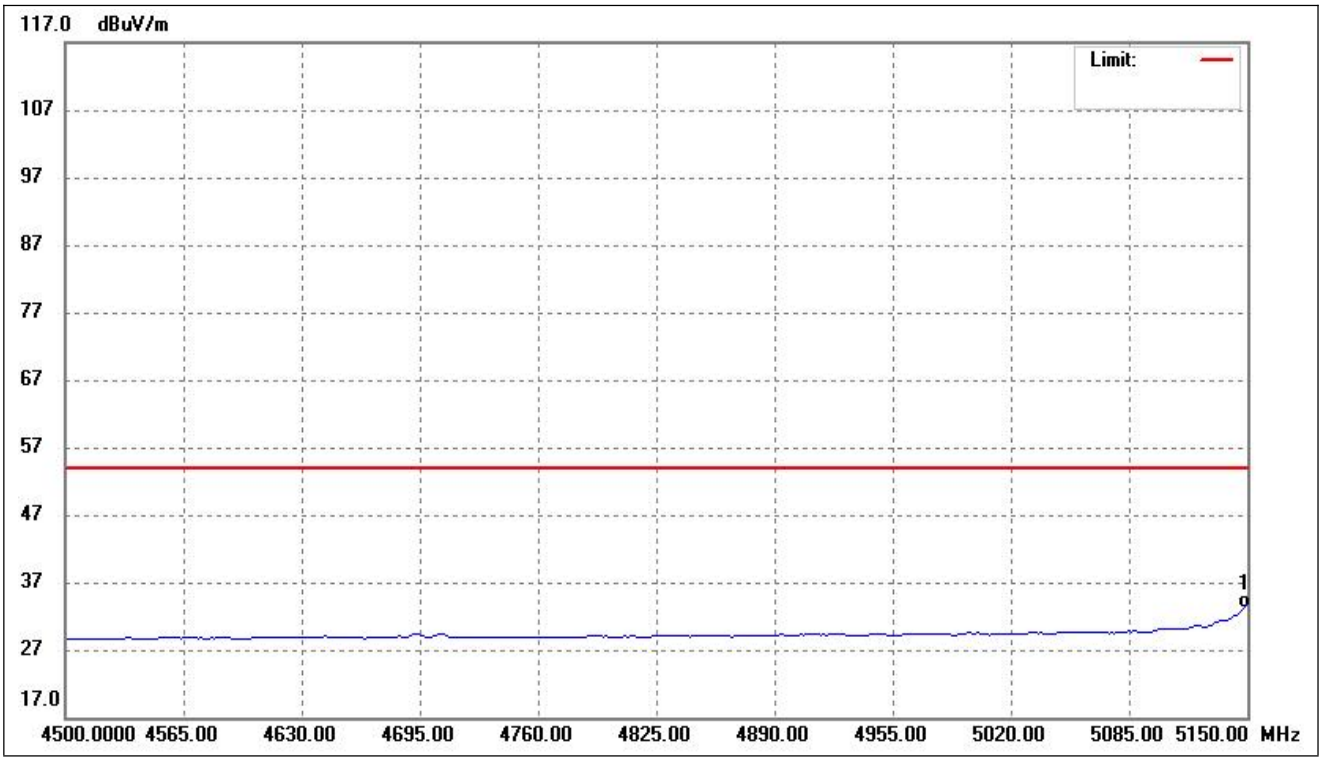
No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	5150.000	46.83	-12.53	34.30	54.00	-19.70	-	-	AVG

802.11ac-VHT20- Restricted Bandedge			
Test Channel	band 5.15-5.25GHz	Polarity:	Horizontal(worst case)



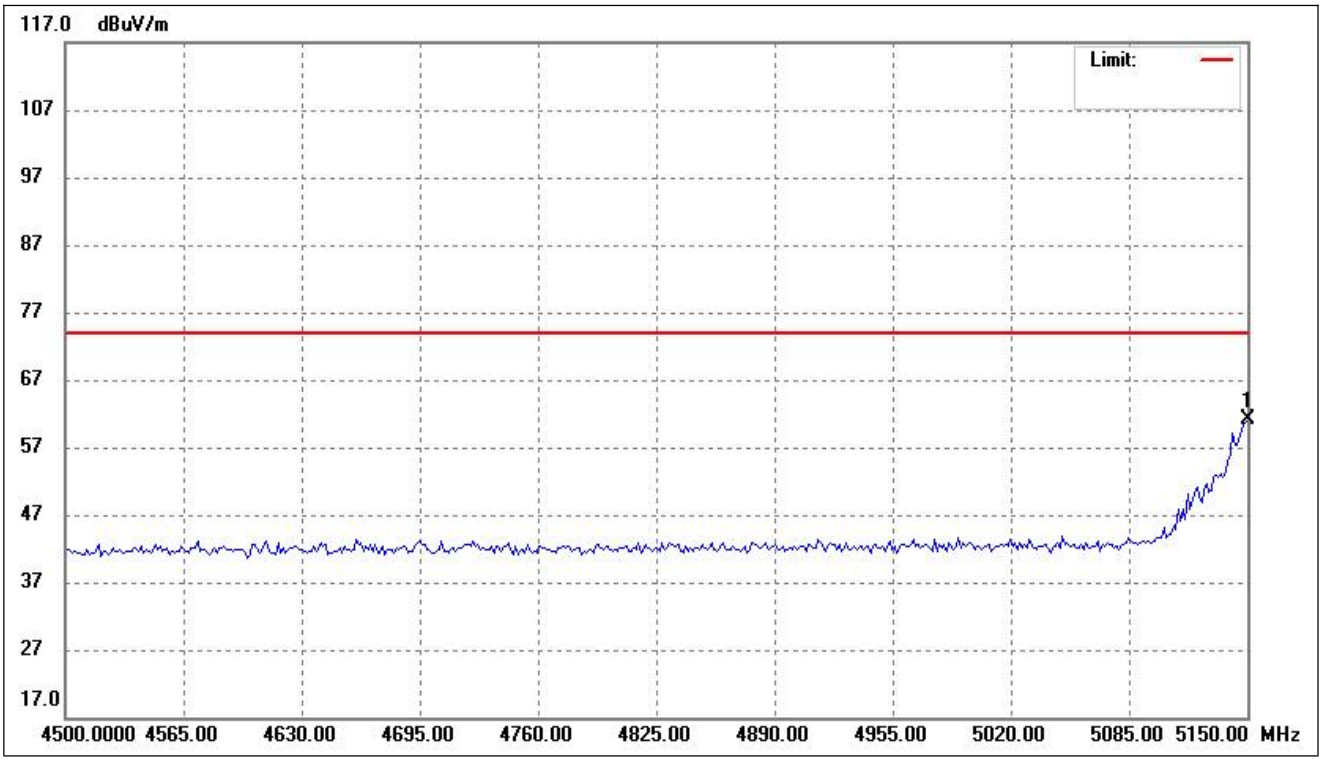
No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	5148.697	68.08	-12.53	55.55	74.00	-18.45	-	-	peak

802.11ac-VHT20- Restricted Bandedge			
Test Channel	band 5.15-5.25GHz	Polarity:	Horizontal(worst case)



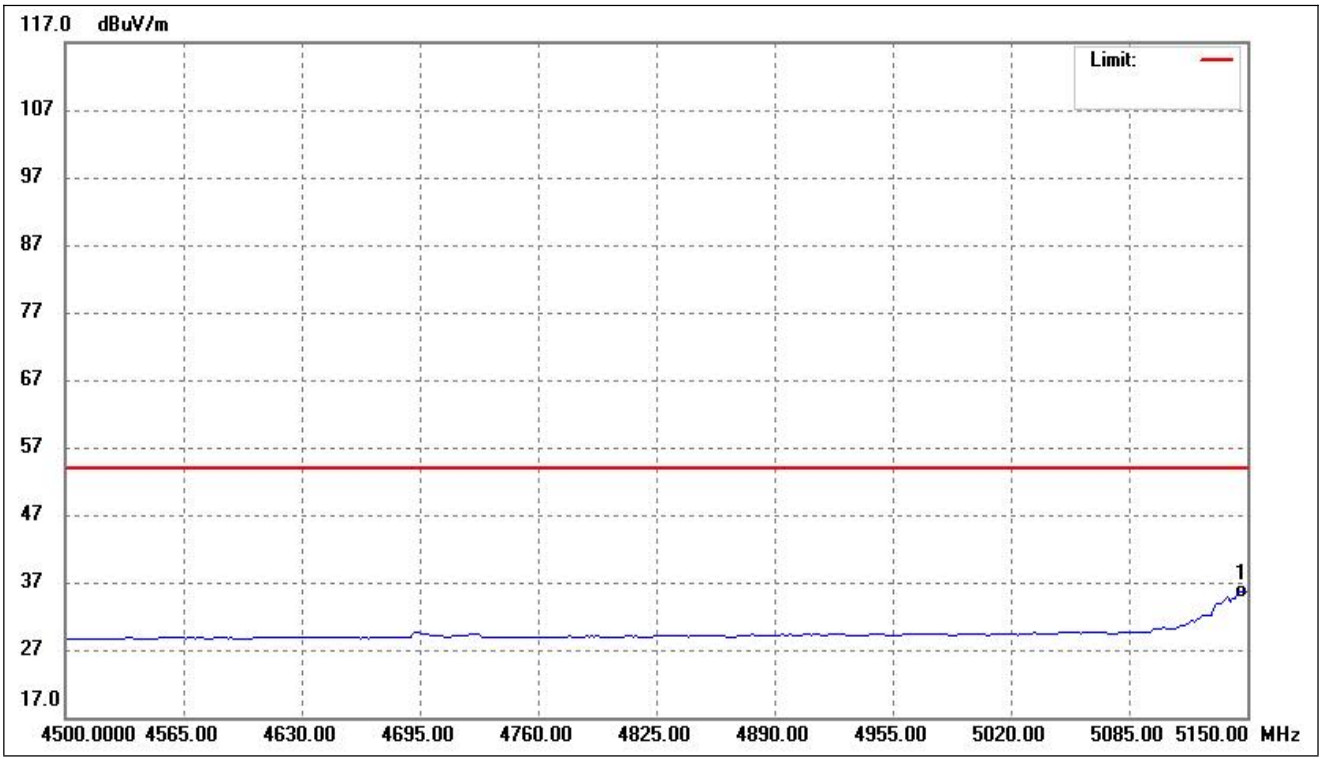
No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	5150.000	46.57	-12.53	34.04	54.00	-19.96	-	-	AVG

802.11n-HT40- Restricted Bandedge			
Test Channel	band 5.15-5.25GHz	Polarity:	Horizontal(worst case)



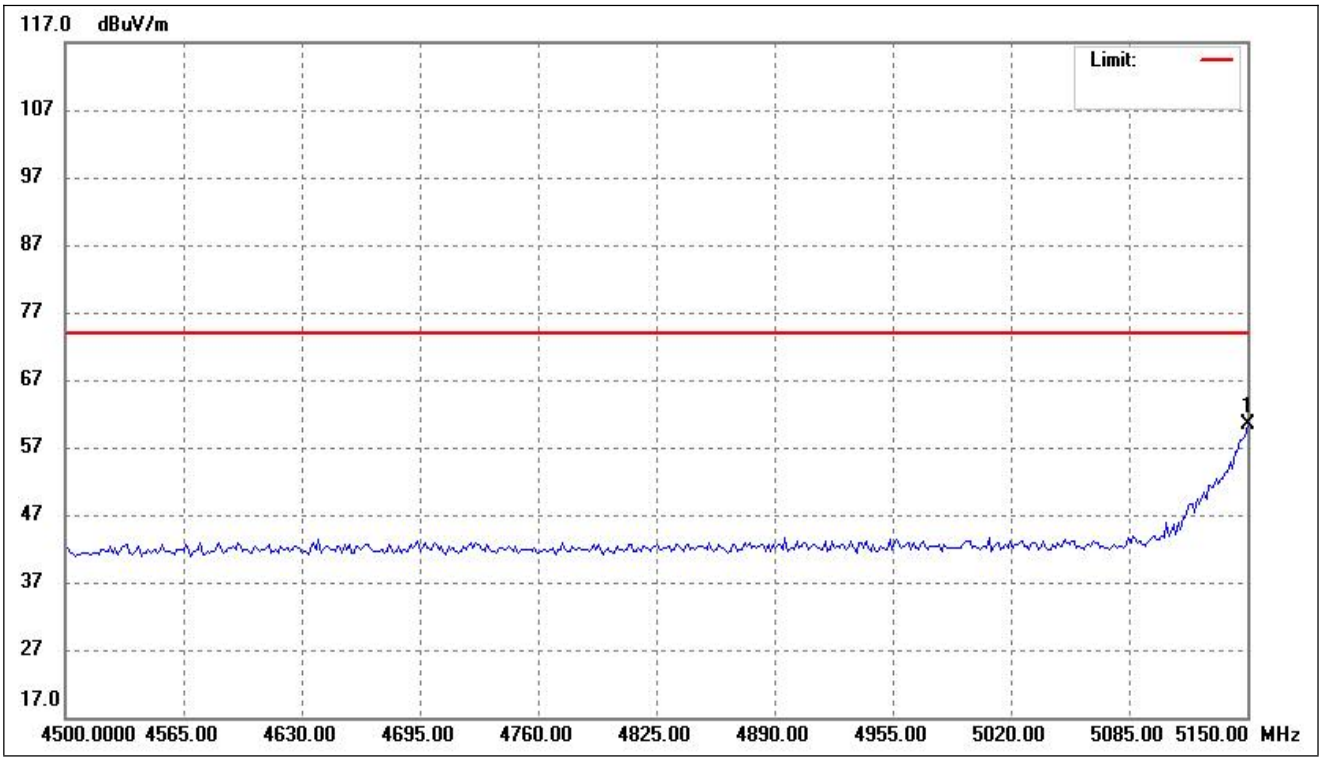
No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	5150.000	73.72	-12.53	61.19	74.00	-12.81	-	-	peak

802.11n-HT40- Restricted Bandedge			
Test Channel	band 5.15-5.25GHz	Polarity:	Horizontal(worst case)



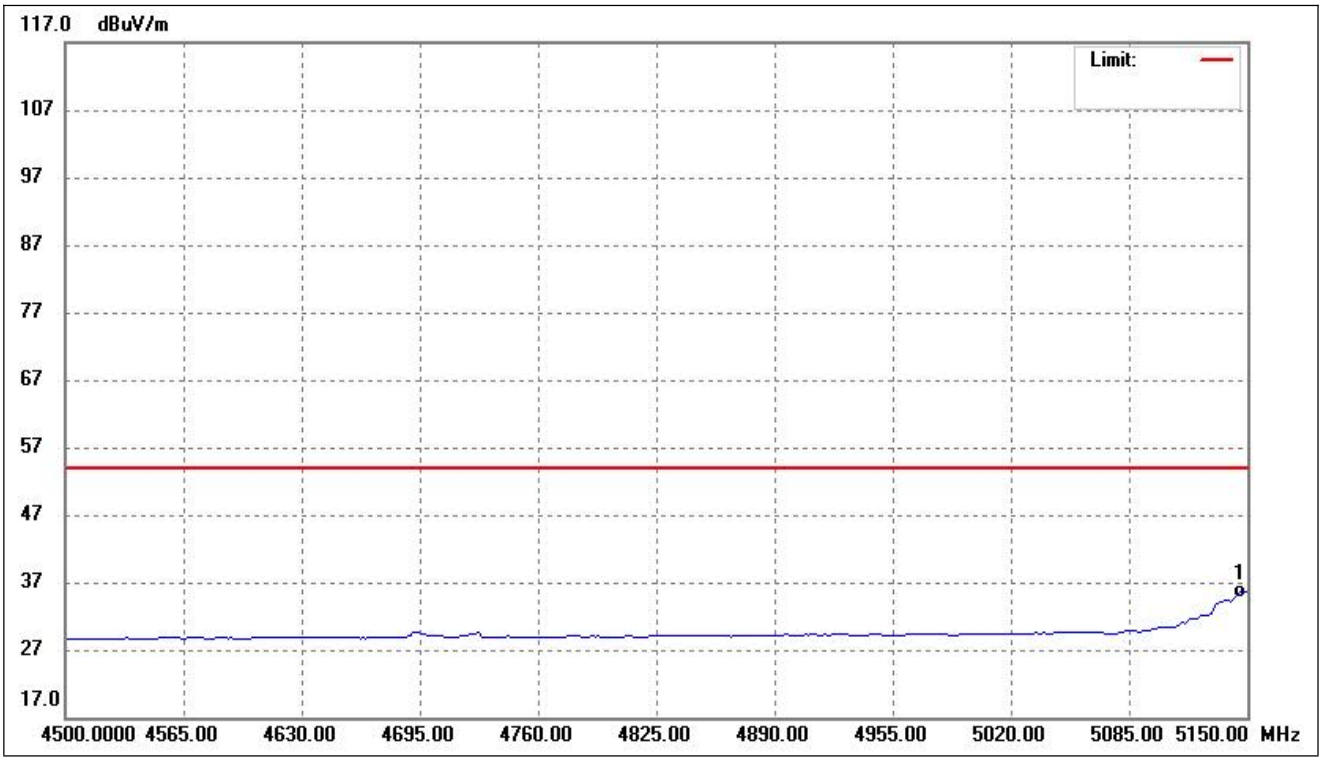
No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	5147.395	48.20	-12.54	35.66	54.00	-18.34	-	-	AVG

802.11ac-VHT40- Restricted Bandedge			
Test Channel	band 5.15-5.25GHz	Polarity:	Horizontal(worst case)



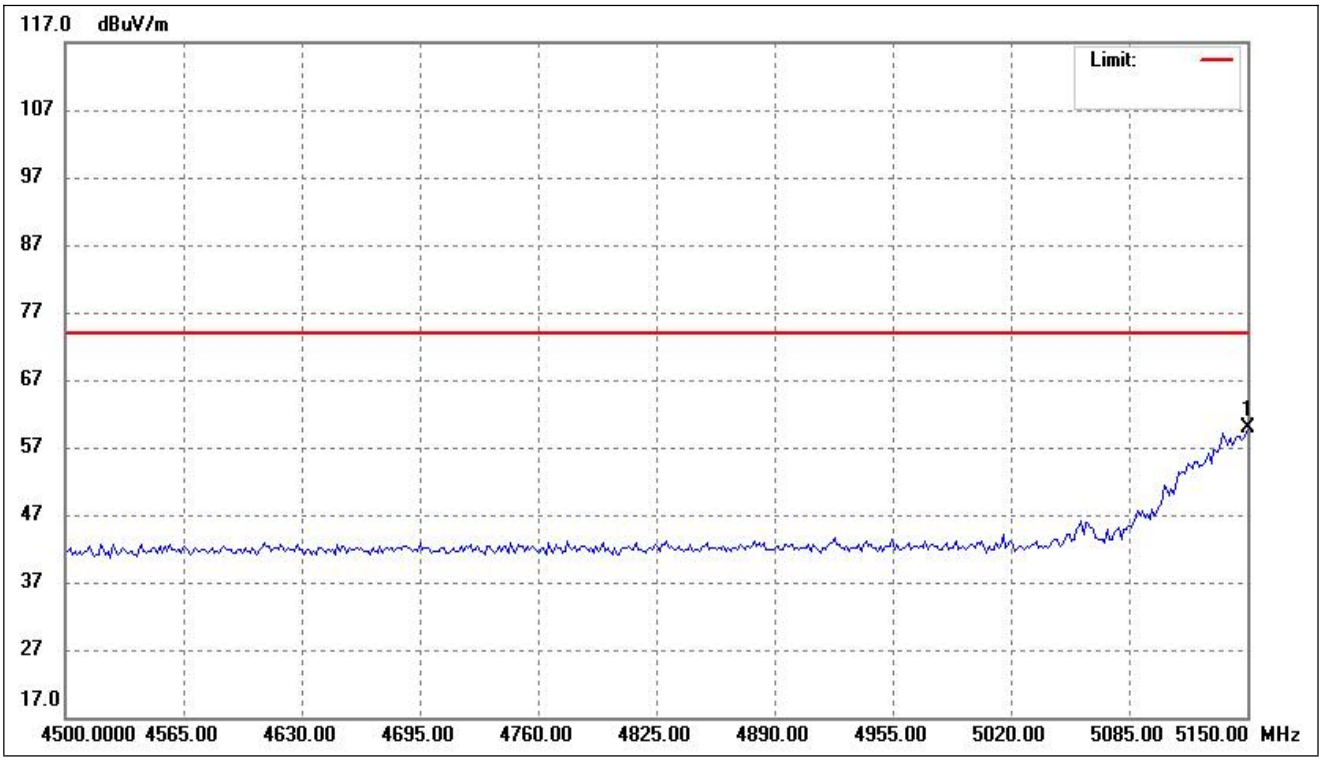
No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	5150.000	72.80	-12.53	60.27	74.00	-13.73	-	-	peak

802.11ac-VHT40- Restricted Bandedge			
Test Channel	band 5.15-5.25GHz	Polarity:	Horizontal(worst case)



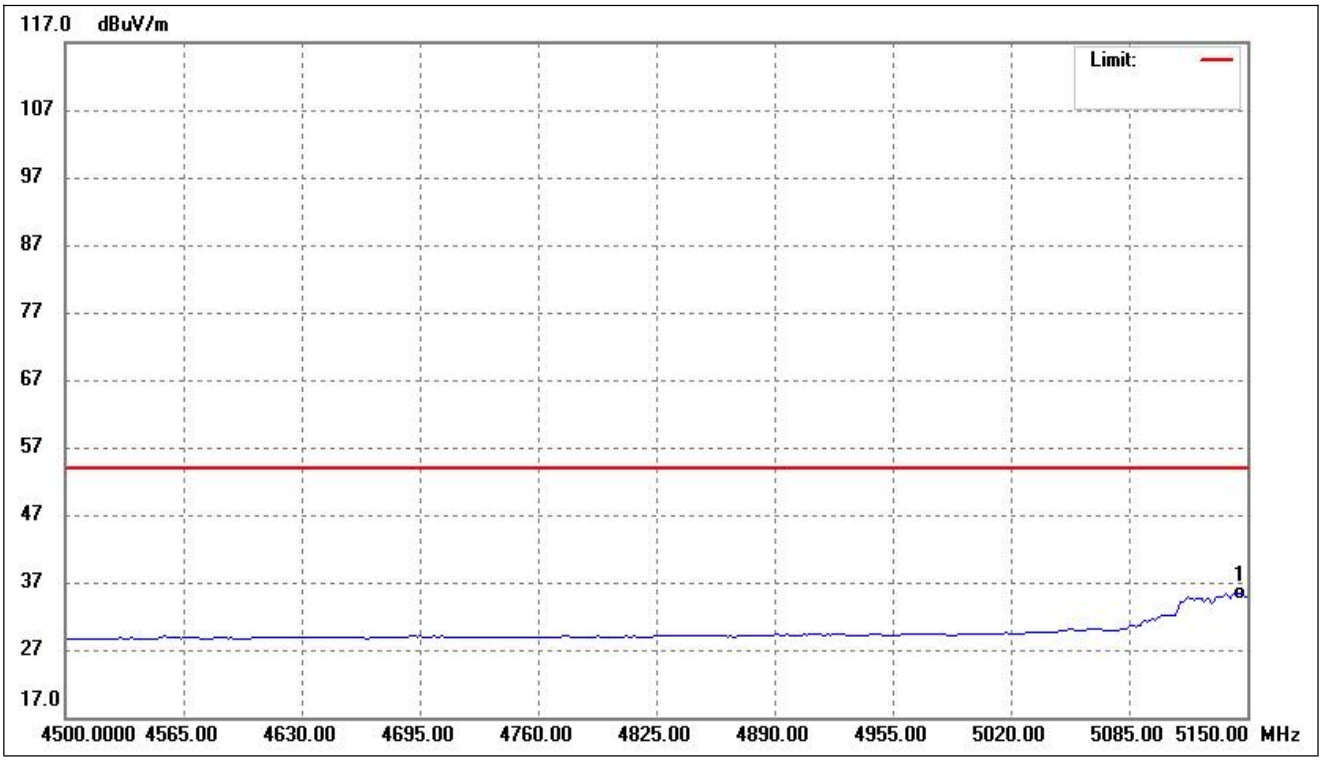
No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	5146.092	48.26	-12.55	35.71	54.00	-18.29	-	-	AVG

802.11ac-VHT80- Restricted Bandedge			
Test Channel	band 5.15-5.25GHz	Polarity:	Horizontal(worst case)



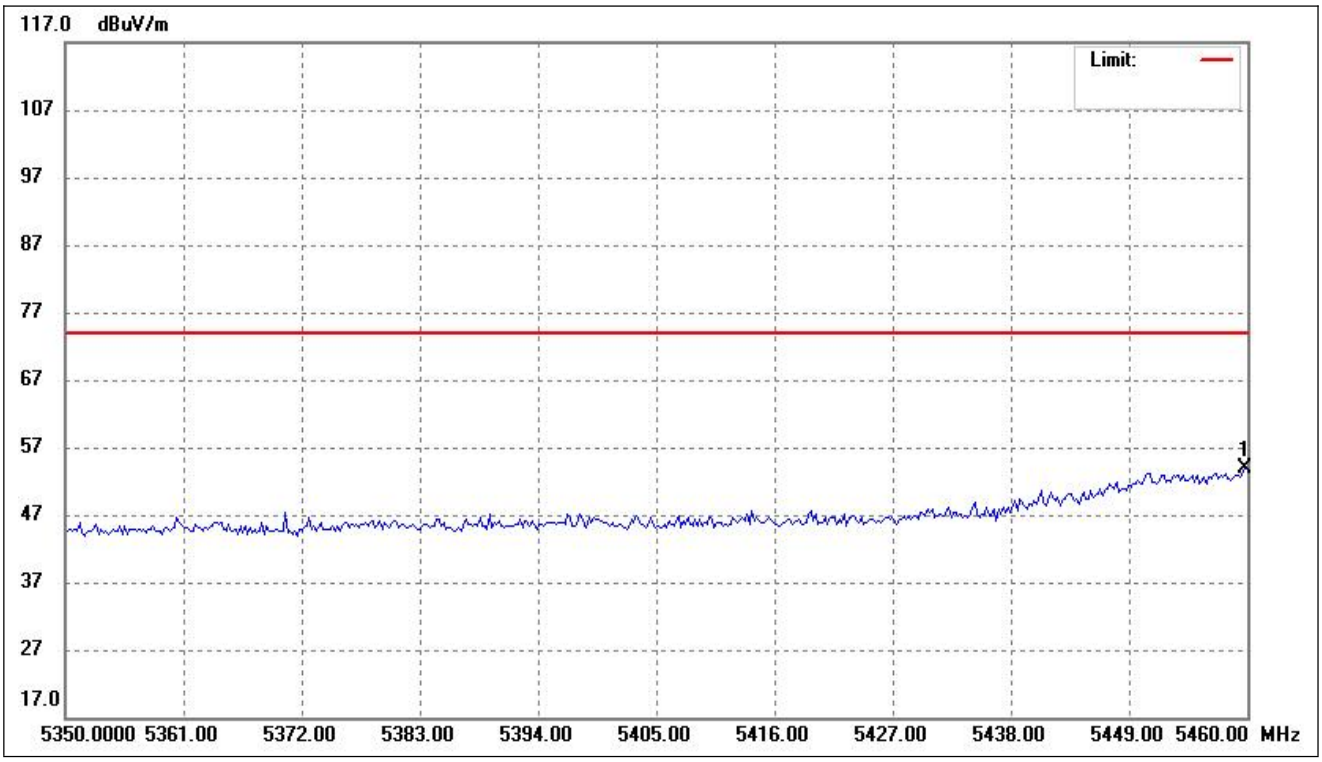
No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	5150.000	72.52	-12.53	59.99	74.00	-14.01	-	-	peak

802.11ac-VHT80- Restricted Bandedge			
Test Channel	band 5.15-5.25GHz	Polarity:	Horizontal(worst case)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	5146.092	48.04	-12.55	35.49	54.00	-18.51	-	-	AVG

802.11a- Restricted Bandedge			
Test Channel	band 5.35-5.47GHz	Polarity:	Horizontal(worst case)

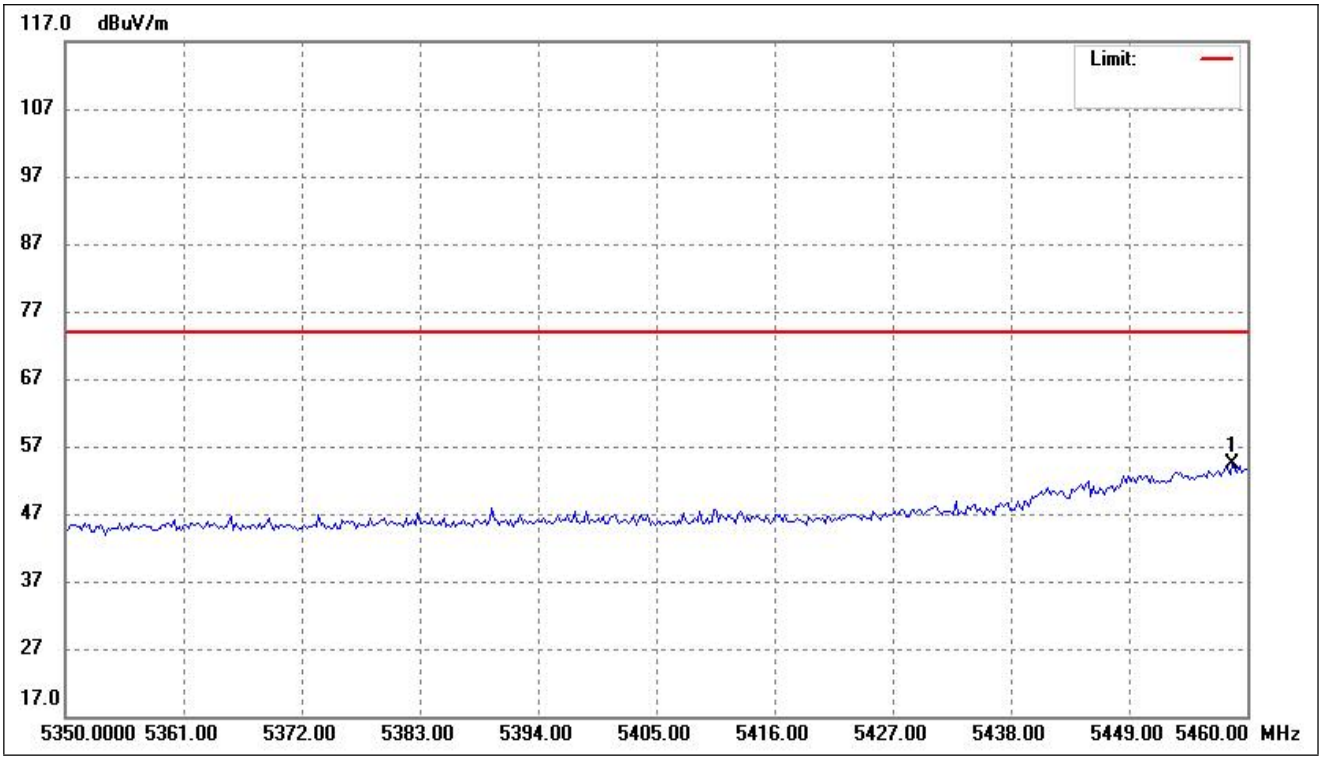


No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	5459.780	64.75	-10.99	53.76	74.00	-20.24	-	-	peak

802.11a- Restricted Bandedge			
Test Channel	band 5.35-5.47GHz	Polarity:	Horizontal(worst case)

No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	5460.000	45.88	-10.99	34.89	54.00	-19.11	-	-	AVG

802.11n-HT20- Restricted Bandedge			
Test Channel	band 5.35-5.47GHz	Polarity:	Horizontal(worst case)

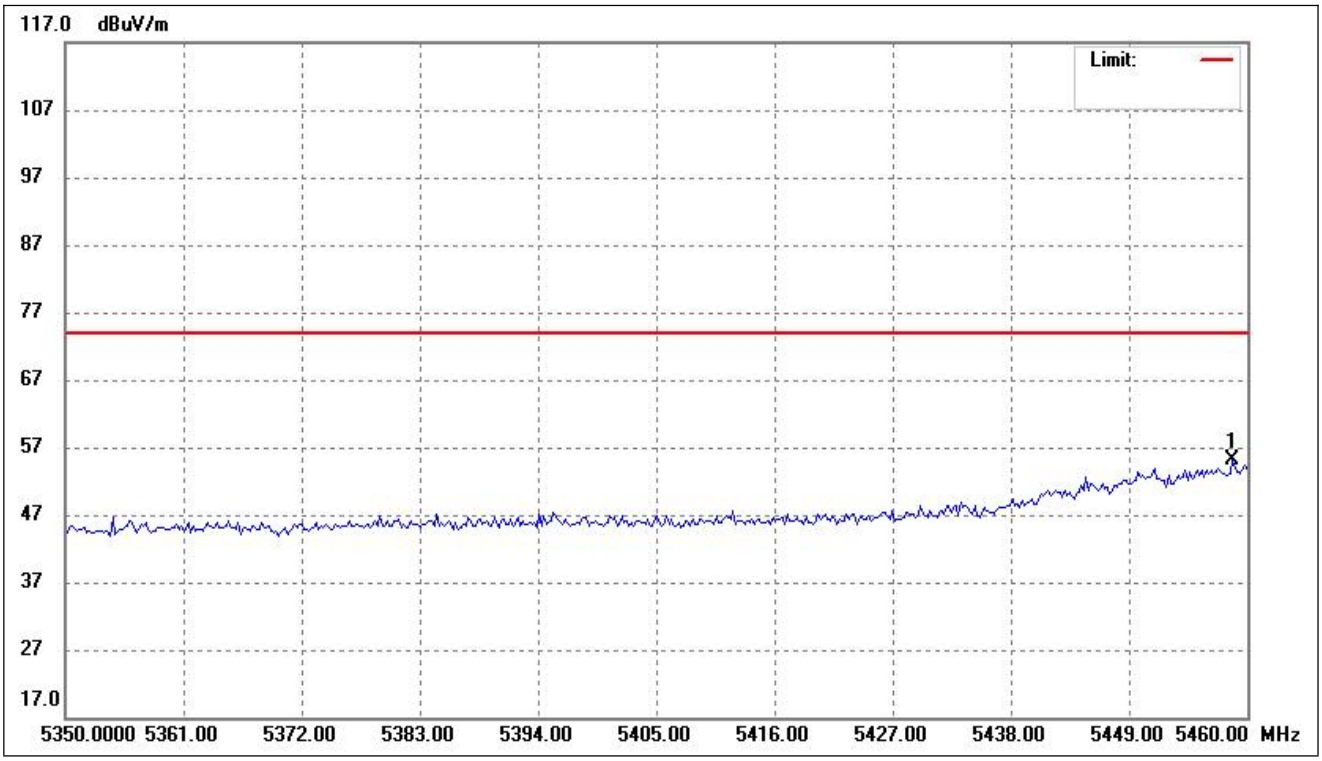


No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	5458.677	65.40	-10.99	54.41	74.00	-19.59	-	-	peak

802.11n-HT20- Restricted Bandedge			
Test Channel	band 5.35-5.47GHz	Polarity:	Horizontal(worst case)

No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	5459.118	46.02	-10.99	35.03	54.00	-18.97	-	-	AVG

802.11ac-VHT20- Restricted Bandedge			
Test Channel	band 5.35-5.47GHz	Polarity:	Horizontal(worst case)

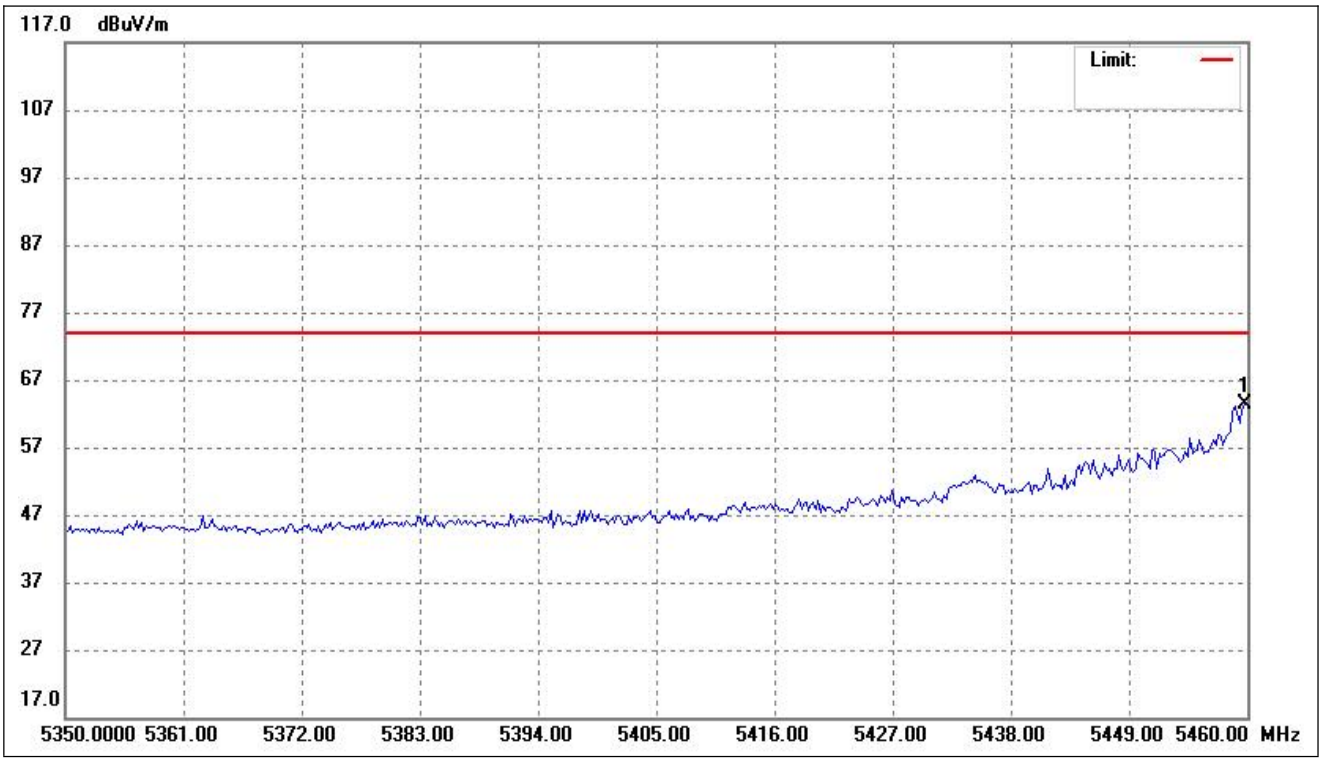


No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	5458.677	66.09	-10.99	55.10	74.00	-18.90	-	-	peak

802.11ac-VHT20- Restricted Bandedge			
Test Channel	band 5.35-5.47GHz	Polarity:	Horizontal(worst case)

No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	5460.000	46.38	-10.99	35.39	54.00	-18.61	-	-	AVG

802.11n-HT40- Restricted Bandedge			
Test Channel	band 5.35-5.47GHz	Polarity:	Horizontal(worst case)

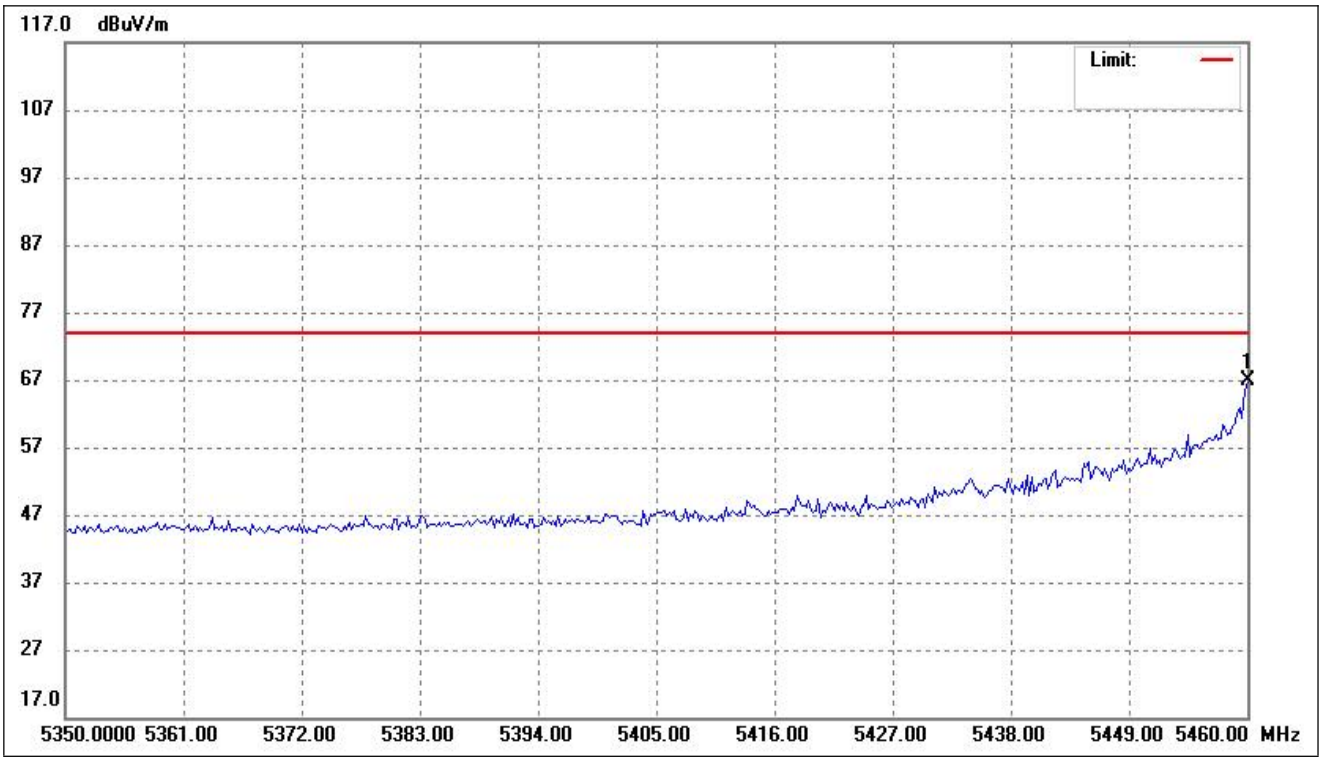


No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	5459.780	74.47	-10.99	63.48	74.00	-10.52	-	-	peak

802.11n-HT40- Restricted Bandedge			
Test Channel	band 5.35-5.47GHz	Polarity:	Horizontal(worst case)

No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	5459.339	48.58	-10.99	37.59	54.00	-16.41	-	-	AVG

802.11ac-VHT40- Restricted Bandedge			
Test Channel	band 5.35-5.47GHz	Polarity:	Horizontal(worst case)

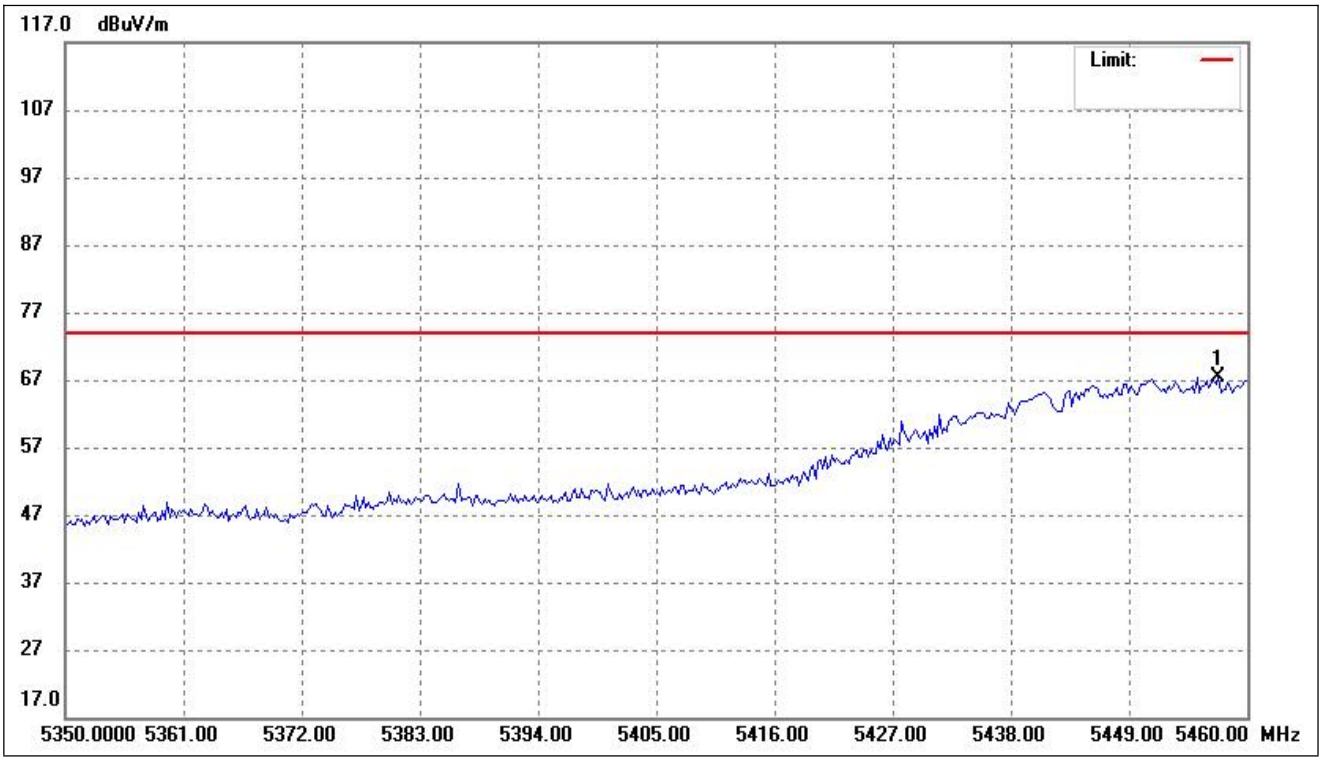


No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	5460.000	77.93	-10.99	66.94	74.00	-7.06	-	-	peak

802.11ac-VHT40- Restricted Bandedge			
Test Channel	band 5.35-5.47GHz	Polarity:	Horizontal(worst case)

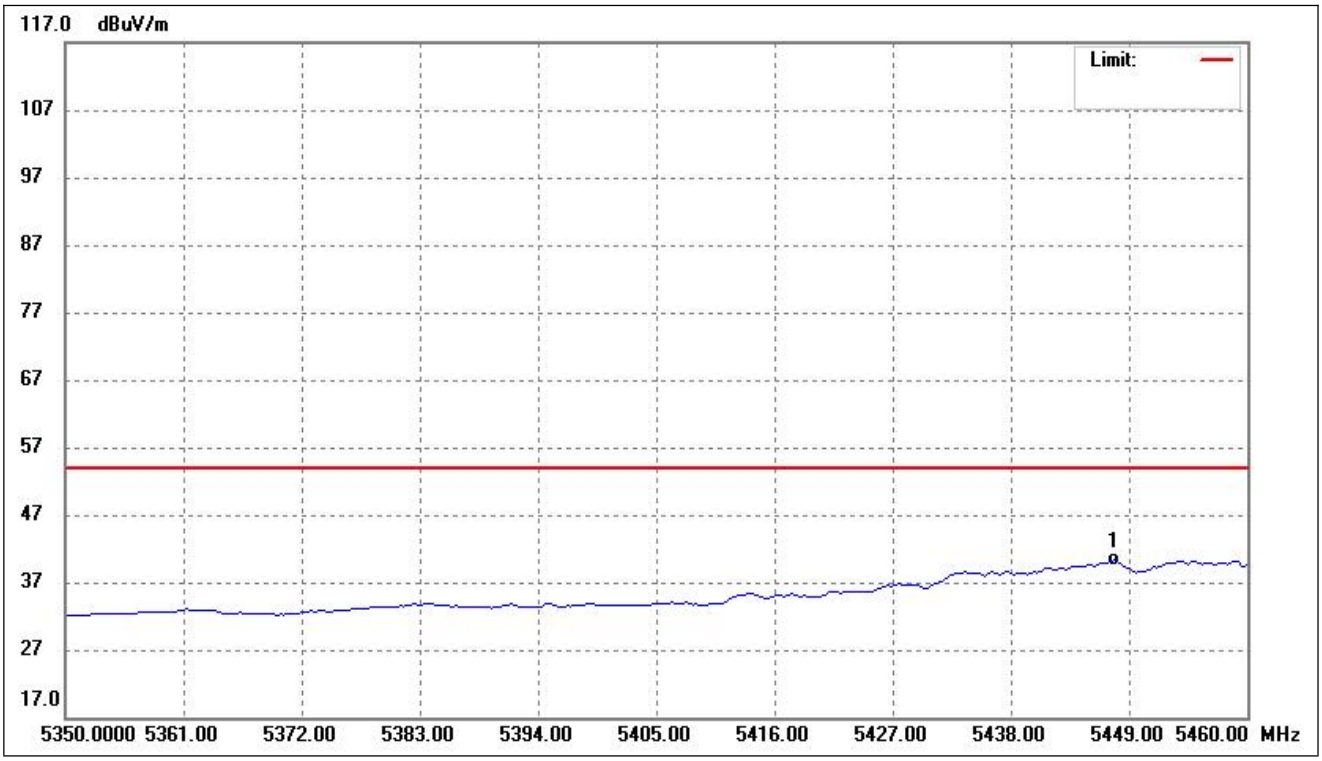
No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	5459.118	48.93	-10.99	37.94	54.00	-16.06	-	-	AVG

802.11ac-VHT80- Restricted Bandedge			
Test Channel	band 5.35-5.47GHz	Polarity:	Horizontal(worst case)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	5457.355	78.40	-11.00	67.40	74.00	-6.60	-	-	peak

802.11ac-VHT80- Restricted Bandedge			
Test Channel	band 5.35-5.47GHz	Polarity:	Horizontal(worst case)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	5447.655	51.40	-11.04	40.36	54.00	-13.64	-	-	AVG

Note: The Restricted Bandedge was tested in Horizontal /Vertical and the worst case position data was reported.

Remark: '-'Means' the test Degree and Height is not recorded by the test software and only show the worst case in the test report.

- For the frequency band 5.15-5.25GHz, 5.250-5.350GHz, 5.470-5.725GHz, 5.725-5.850GHz (802.11a)
- Harmonics And Spurious Emissions

Frequency (MHz)	Reading (dBuV/m)	Correct dB	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Polar H/V	Detector
Low Channel (5180MHz)							
10360	55.65	7.11	62.76	74	-11.24	H	PK
10360	41.62	7.11	48.73	54	-5.27	H	AV
10360	57.01	7.11	64.12	74	-9.88	V	PK
10360	41.42	7.11	48.53	54	-5.47	V	AV
Middle Channel (5200MHz)							
10400	58.78	7.22	66.00	74	-8.00	H	PK
10400	39.36	7.22	46.58	54	-7.42	H	AV
10400	56.99	7.22	64.21	74	-9.79	V	PK
10400	38.25	7.22	45.47	54	-8.53	V	AV
High Channel (5240MHz)							
10480	57.63	7.69	65.32	74	-8.68	H	PK
10480	40.38	7.69	48.07	54	-5.93	H	AV
10480	57.39	7.69	65.08	74	-8.92	V	PK
10480	41.20	7.69	48.89	54	-5.11	V	AV

Frequency (MHz)	Reading (dBuV/m)	Correct dB	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Polar H/V	Detector
Low Channel (5260MHz)							
10520	57.52	7.96	65.48	74	-8.52	H	PK
10520	38.54	7.96	46.50	54	-7.50	H	AV
10520	55.63	7.96	63.59	74	-10.41	V	PK
10520	38.95	7.96	46.91	54	-7.09	V	AV
Middle Channel (5280MHz)							
10560	55.26	8.02	63.28	74	-10.72	H	PK
10560	39.31	8.02	47.33	54	-6.67	H	AV
10560	56.63	8.02	64.65	74	-9.35	V	PK
10560	41.42	8.02	49.44	54	-4.56	V	AV
High Channel (5320MHz)							
10640	56.73	8.35	65.08	74	-8.92	H	PK
10640	38.31	8.35	46.66	54	-7.34	H	AV
10640	58.65	8.35	67.00	74	-7.00	V	PK
10640	40.70	8.35	49.05	54	-4.95	V	AV

Frequency	Reading	Correct	Result	Limit	Margin	Polar	Detector
(MHz)	(dBuV/m)	dB	(dBuV/m)	(dBuV/m)	(dB)	H/V	
Low Channel (5500MHz)							
11000	58.02	8.82	66.84	74	-7.16	H	PK
11000	41.34	8.82	50.16	54	-3.84	H	AV
11000	55.68	8.82	64.50	74	-9.50	V	PK
11000	39.25	8.82	48.07	54	-5.93	V	AV
Middle Channel (5600MHz)							
11200	55.89	8.92	64.81	74	-9.19	H	PK
11200	38.94	8.92	47.86	54	-6.14	H	AV
11200	58.00	8.92	66.92	74	-7.08	V	PK
11200	39.12	8.92	48.04	54	-5.96	V	AV
High Channel (5700MHz)							
11400	58.07	9.36	67.43	74	-6.57	H	PK
11400	38.85	9.36	48.21	54	-5.79	H	AV
11400	55.02	9.36	64.38	74	-9.62	V	PK
11400	41.30	9.36	50.66	54	-3.34	V	AV

Frequency	Reading	Correct	Result	Limit	Margin	Polar	Detector
(MHz)	(dBuV/m)	dB	(dBuV/m)	(dBuV/m)	(dB)	H/V	
Low Channel (5745MHz)							
11490	56.21	9.45	65.66	74	-8.34	H	PK
11490	40.45	9.45	49.90	54	-4.10	H	AV
11490	57.72	9.45	67.17	74	-6.83	V	PK
11490	38.98	9.45	48.43	54	-5.57	V	AV
Middle Channel (5785MHz)							
11570	58.54	9.62	68.16	74	-5.84	H	PK
11570	39.65	9.62	49.27	54	-4.73	H	AV
11570	58.36	9.62	67.98	74	-6.02	V	PK
11570	38.17	9.62	47.79	54	-6.21	V	AV
High Channel (5825MHz)							
11650	56.63	9.84	66.47	74	-7.53	H	PK
11650	39.90	9.84	49.74	54	-4.26	H	AV
11650	55.21	9.84	65.05	74	-8.95	V	PK
11650	40.08	9.84	49.92	54	-4.08	V	AV

➢ Out of Band edge for 5150-5250MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5150	-43.76	-27
Highest	Above 5350	-42.53	-27
Note: the data just list the worst cases			

➢ Out of Band edge for 5250-5350MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5150	-42.41	-27
Highest	Above 5350	-41.72	-27
Note: the data just list the worst cases			

➢ Out of Band edge for 5470-5725MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5470	-42.10	-27
Highest	Above 5725	-39.86	-27
Note: the data just list the worst cases			

➢ Out of Band edge for 5725-5850MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5650	-46.75	-27
	5650 to 5700	-33.64	-27 to -17
	5700 to 5720	-27.19	-17 to 15.6
	5720 to 5725	-17.25	15.6 to 27
Highest	5850 to 5855	-14.31	27 to 15.6
	5855 to 5875	-21.27	15.6 to -17
	5875 to 5925	-33.18	-17 to -27
	Above 5925	-38.24	-27
Note: the data just list the worst cases			

- For the frequency band 5.15-5.25GHz, 5.250-5.350GHz, 5.470-5.725GHz, 5.725-5.850GHz (802.11n HT20)
- Harmonics And Spurious Emissions

Frequency (MHz)	Reading (dBuV/m)	Correct dB	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Polar H/V	Detector
Low Channel (5180MHz)							
10360	57.20	7.11	64.31	74	-9.69	H	PK
10360	41.47	7.11	48.58	54	-5.42	H	AV
10360	56.99	7.11	64.10	74	-9.90	V	PK
10360	38.87	7.11	45.98	54	-8.02	V	AV
Middle Channel (5200MHz)							
10400	57.98	7.22	65.20	74	-8.80	H	PK
10400	39.49	7.22	46.71	54	-7.29	H	AV
10400	58.10	7.22	65.32	74	-8.68	V	PK
10400	38.38	7.22	45.60	54	-8.40	V	AV
High Channel (5240MHz)							
10480	57.68	7.69	65.37	74	-8.63	H	PK
10480	40.34	7.69	48.03	54	-5.97	H	AV
10480	58.91	7.69	66.60	74	-7.40	V	PK
10480	38.12	7.69	45.81	54	-8.19	V	AV

Frequency (MHz)	Reading (dBuV/m)	Correct dB	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Polar H/V	Detector
Low Channel (5260MHz)							
10520	58.12	7.96	66.08	74	-7.92	H	PK
10520	38.10	7.96	46.06	54	-7.94	H	AV
10520	55.18	7.96	63.14	74	-10.86	V	PK
10520	41.72	7.96	49.68	54	-4.32	V	AV
Middle Channel (5280MHz)							
10560	57.11	8.02	65.13	74	-8.87	H	PK
10560	41.64	8.02	49.66	54	-4.34	H	AV
10560	57.56	8.02	65.58	74	-8.42	V	PK
10560	40.85	8.02	48.87	54	-5.13	V	AV
High Channel (5320MHz)							
10640	58.69	8.35	67.04	74	-6.96	H	PK
10640	41.09	8.35	49.44	54	-4.56	H	AV
10640	55.22	8.35	63.57	74	-10.43	V	PK
10640	38.28	8.35	46.63	54	-7.37	V	AV

Frequency	Reading	Correct	Result	Limit	Margin	Polar	Detector
(MHz)	(dBuV/m)	dB	(dBuV/m)	(dBuV/m)	(dB)	H/V	
Low Channel (5500MHz)							
11000	56.52	8.82	65.34	74	-8.66	H	PK
11000	41.37	8.82	50.19	54	-3.81	H	AV
11000	55.88	8.82	64.70	74	-9.30	V	PK
11000	39.07	8.82	47.89	54	-6.11	V	AV
Middle Channel (5600MHz)							
11200	58.07	8.92	66.99	74	-7.01	H	PK
11200	41.20	8.92	50.12	54	-3.88	H	AV
11200	55.57	8.92	64.49	74	-9.51	V	PK
11200	41.19	8.92	50.11	54	-3.89	V	AV
High Channel (5700MHz)							
11400	56.34	9.84	66.18	74	-7.82	H	PK
11400	40.27	9.84	50.11	54	-3.89	H	AV
11400	56.40	9.84	66.24	74	-7.76	V	PK
11400	40.57	9.84	50.41	54	-3.59	V	AV

Frequency	Reading	Correct	Result	Limit	Margin	Polar	Detector
(MHz)	(dBuV/m)	dB	(dBuV/m)	(dBuV/m)	(dB)	H/V	
Low Channel (5745MHz)							
11490	57.93	9.45	67.38	74	-6.62	H	PK
11490	38.97	9.45	48.42	54	-5.58	H	AV
11490	57.77	9.45	67.22	74	-6.78	V	PK
11490	40.58	9.45	50.03	54	-3.97	V	AV
Middle Channel (5785MHz)							
11570	57.17	9.62	66.79	74	-7.21	H	PK
11570	40.37	9.62	49.99	54	-4.01	H	AV
11570	57.13	9.62	66.75	74	-7.25	V	PK
11570	39.21	9.62	48.83	54	-5.17	V	AV
High Channel (5825MHz)							
11650	56.44	9.84	66.28	74	-7.72	H	PK
11650	41.45	9.84	51.29	54	-2.71	H	AV
11650	56.13	9.84	65.97	74	-8.03	V	PK
11650	41.86	9.84	51.70	54	-2.30	V	AV

➢ Out of Band edge 5150-5250MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5150	-40.85	-27
Highest	Above 5350	-41.61	-27
Note: the data just list the worst cases			

➢ Out of Band edge for 5250-5350MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5150	-41.63	-27
Highest	Above 5350	-42.51	-27
Note: the data just list the worst cases			

➢ Out of Band edge for 5470-5725MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5470	-38.79	-27
Highest	Above 5725	-39.52	-27
Note: the data just list the worst cases			

➢ Out of Band edge for 5725-5850MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5650	-46.76	-27
	5650 to 5700	-33.22	-27 to -17
	5700 to 5720	-27.31	-17 to 15.6
	5720 to 5725	-17.70	15.6 to 27
Highest	5850 to 5855	-14.65	27 to 15.6
	5855 to 5875	-21.31	15.6 to -17
	5875 to 5925	-33.29	-17 to -27
	Above 5925	-38.14	-27
Note: the data just list the worst cases			

- For the frequency band 5.15-5.25GHz, 5.250-5.350GHz, 5.470-5.725GHz, 5.725-5.850GHz (802.11ac-VHT20)
- Harmonics And Spurious Emissions

Frequency (MHz)	Reading (dBuV/m)	Correct dB	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Polar H/V	Detector
Low Channel (5180MHz)							
10360	58.40	7.11	65.51	74	-8.49	H	PK
10360	39.81	7.11	46.92	54	-7.08	H	AV
10360	56.52	7.11	63.63	74	-10.37	V	PK
10360	41.08	7.11	48.19	54	-5.81	V	AV
Middle Channel (5200MHz)							
10400	57.45	7.22	64.67	74	-9.33	H	PK
10400	40.57	7.22	47.79	54	-6.21	H	AV
10400	56.95	7.22	64.17	74	-9.83	V	PK
10400	39.91	7.22	47.13	54	-6.87	V	AV
High Channel (5240MHz)							
10480	58.80	7.69	66.49	74	-7.51	H	PK
10480	39.93	7.69	47.62	54	-6.38	H	AV
10480	57.59	7.69	65.28	74	-8.72	V	PK
10480	38.81	7.69	46.50	54	-7.50	V	AV

Frequency (MHz)	Reading (dBuV/m)	Correct dB	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Polar H/V	Detector
Low Channel (5260MHz)							
10520	55.07	7.96	63.03	74	-10.97	H	PK
10520	40.54	7.96	48.50	54	-5.50	H	AV
10520	55.65	7.96	63.61	74	-10.39	V	PK
10520	39.04	7.96	47.00	54	-7.00	V	AV
Middle Channel (5280MHz)							
10560	56.57	8.02	64.59	74	-9.41	H	PK
10560	38.41	8.02	46.43	54	-7.57	H	AV
10560	58.72	8.02	66.74	74	-7.26	V	PK
10560	39.29	8.02	47.31	54	-6.69	V	AV
High Channel (5320MHz)							
10640	58.31	8.35	66.66	74	-7.34	H	PK
10640	40.49	8.35	48.84	54	-5.16	H	AV
10640	58.49	8.35	66.84	74	-7.16	V	PK
10640	39.87	8.35	48.22	54	-5.78	V	AV

Frequency	Reading	Correct	Result	Limit	Margin	Polar	Detector
(MHz)	(dBuV/m)	dB	(dBuV/m)	(dBuV/m)	(dB)	H/V	
Low Channel (5500MHz)							
11000	56.33	8.82	65.15	74	-8.85	H	PK
11000	38.91	8.82	47.73	54	-6.27	H	AV
11000	55.63	8.82	64.45	74	-9.55	V	PK
11000	41.81	8.82	50.63	54	-3.37	V	AV
Middle Channel (5600MHz)							
11200	57.75	8.92	66.67	74	-7.33	H	PK
11200	38.82	8.92	47.74	54	-6.26	H	AV
11200	58.49	8.92	67.41	74	-6.59	V	PK
11200	40.57	8.92	49.49	54	-4.51	V	AV
High Channel (5700MHz)							
11400	55.93	9.84	65.77	74	-8.23	H	PK
11400	41.50	9.84	51.34	54	-2.66	H	AV
11400	57.48	9.84	67.32	74	-6.68	V	PK
11400	39.00	9.84	48.84	54	-5.16	V	AV

Frequency	Reading	Correct	Result	Limit	Margin	Polar	Detector
(MHz)	(dBuV/m)	dB	(dBuV/m)	(dBuV/m)	(dB)	H/V	
Low Channel (5745MHz)							
11490	55.95	9.45	65.40	74	-8.60	H	PK
11490	41.65	9.45	51.10	54	-2.90	H	AV
11490	55.12	9.45	64.57	74	-9.43	V	PK
11490	38.85	9.45	48.30	54	-5.70	V	AV
Middle Channel (5785MHz)							
11570	55.98	9.62	65.60	74	-8.40	H	PK
11570	38.37	9.62	47.99	54	-6.01	H	AV
11570	55.35	9.62	64.97	74	-9.03	V	PK
11570	41.50	9.62	51.12	54	-2.88	V	AV
High Channel (5825MHz)							
11650	56.56	9.84	66.40	74	-7.60	H	PK
11650	41.45	9.84	51.29	54	-2.71	H	AV
11650	56.30	9.84	66.14	74	-7.86	V	PK
11650	40.19	9.84	50.03	54	-3.97	V	AV

➢ Out of Band edge 5150-5250MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5150	-40.29	-27
Highest	Above 5350	-41.36	-27
Note: the data just list the worst cases			

➢ Out of Band edge for 5250-5350MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5150	-41.51	-27
Highest	Above 5350	-42.66	-27
Note: the data just list the worst cases			

➢ Out of Band edge for 5470-5725MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5470	-38.70	-27
Highest	Above 5725	-39.08	-27
Note: the data just list the worst cases			

➢ Out of Band edge for 5725-5850MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5650	-46.35	-27
	5650 to 5700	-33.16	-27 to -17
	5700 to 5720	-27.62	-17 to 15.6
	5720 to 5725	-17.74	15.6 to 27
Highest	5850 to 5855	-14.59	27 to 15.6
	5855 to 5875	-21.36	15.6 to -17
	5875 to 5925	-33.28	-17 to -27
	Above 5925	-38.11	-27
Note: the data just list the worst cases			

- For the frequency band 5.15-5.25GHz, 5.250-5.350GHz, 5.470-5.725GHz, 5.725-5.850GHz (802.11n HT40)
- Harmonics And Spurious Emissions

Frequency (MHz)	Reading (dBuV/m)	Correct dB	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Polar H/V	Detector
Low Channel (5190MHz)							
10380	57.90	7.89	65.79	74	-8.21	H	PK
10380	40.86	7.89	48.75	54	-5.25	H	AV
10380	55.16	7.89	63.05	74	-10.95	V	PK
10380	41.80	7.89	49.69	54	-4.31	V	AV
High Channel (5230MHz)							
10460	55.85	7.97	63.82	74	-10.18	H	PK
10460	40.30	7.97	48.27	54	-5.73	H	AV
10460	55.05	7.97	63.02	74	-10.98	V	PK
10460	40.09	7.97	48.06	54	-5.94	V	AV

Frequency (MHz)	Reading (dBuV/m)	Correct dB	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Polar H/V	Detector
Low Channel (5270MHz)							
10540	58.06	8.16	66.22	74	-7.78	H	PK
10540	39.66	8.16	47.82	54	-6.18	H	AV
10540	58.09	8.16	66.25	74	-7.75	V	PK
10540	41.67	8.16	49.83	54	-4.17	V	AV
High Channel (5310MHz)							
10620	56.30	8.57	64.87	74	-9.13	H	PK
10620	40.51	8.57	49.08	54	-4.92	H	AV
10620	55.90	8.57	64.47	74	-9.53	V	PK
10620	41.22	8.57	49.79	54	-4.21	V	AV

Frequency	Reading	Correct	Result	Limit	Margin	Polar	Detector
(MHz)	(dBuV/m)	dB	(dBuV/m)	(dBuV/m)	(dB)	H/V	
Low Channel (5510MHz)							
11020	57.68	9.16	66.84	74	-7.16	H	PK
11020	40.41	9.16	49.57	54	-4.43	H	AV
11020	56.07	9.16	65.23	74	-8.77	V	PK
11020	40.41	9.16	49.57	54	-4.43	V	AV
Middle Channel (5590MHz)							
11180	55.01	9.29	64.30	74	-9.70	H	PK
11180	41.32	9.29	50.61	54	-3.39	H	AV
11180	58.96	9.29	68.25	74	-5.75	V	PK
11180	39.27	9.29	48.56	54	-5.44	V	AV
High Channel (5670MHz)							
11340	55.32	9.43	64.75	74	-9.25	H	PK
11340	38.54	9.43	47.97	54	-6.03	H	AV
11340	56.29	9.43	65.72	74	-8.28	V	PK
11340	39.77	9.43	49.20	54	-4.80	V	AV

Frequency	Reading	Correct	Result	Limit	Margin	Polar	Detector
(MHz)	(dBuV/m)	dB	(dBuV/m)	(dBuV/m)	(dB)	H/V	
Low Channel (5755MHz)							
11510	57.58	9.45	67.03	74	-6.97	H	PK
11510	38.29	9.45	47.74	54	-6.26	H	AV
11510	55.33	9.45	64.78	74	-9.22	V	PK
11510	38.87	9.45	48.32	54	-5.68	V	AV
High Channel (5795MHz)							
11590	55.20	9.27	64.47	74	-9.53	H	PK
11590	38.03	9.27	47.30	54	-6.70	H	AV
11590	57.16	9.27	66.43	74	-7.57	V	PK
11590	40.98	9.27	50.25	54	-3.75	V	AV

➢ Out of Band edge for 5150-5250MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5150	-39.62	-27
Highest	Above 5350	-38.57	-27
Note: the data just list the worst cases			

➢ Out of Band edge for 5250-5350MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5150	-37.64	-27
Highest	Above 5350	-38.59	-27
Note: the data just list the worst cases			

➢ Out of Band edge for 5470-5725MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5470	-35.18	-27
Highest	Above 5725	-37.64	-27
Note: the data just list the worst cases			

➢ Out of Band edge for 5725-5850MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5715	-41.76	-27
	5715 to 5725	-35.68	-17
Highest	5850 to 5860	-37.25	-17
	Above 5860	-38.30	-27
Note: the data just list the worst cases			

- For the frequency band 5.15-5.25GHz, 5.250-5.350GHz, 5.470-5.725GHz, 5.725-5.850GHz (802.11ac-VHT40)
- Harmonics And Spurious Emissions

Frequency	Reading	Correct	Result	Limit	Margin	Polar	Detector
(MHz)	(dBuV/m)	dB	(dBuV/m)	(dBuV/m)	(dB)	H/V	
Low Channel (5190MHz)							
10380	58.91	7.89	66.80	74	-7.20	H	PK
10380	38.88	7.89	46.77	54	-7.23	H	AV
10380	56.28	7.89	64.17	74	-9.83	V	PK
10380	39.13	7.89	47.02	54	-6.98	V	AV
High Channel (5230MHz)							
10460	58.66	7.97	66.63	74	-7.37	H	PK
10460	39.33	7.97	47.30	54	-6.70	H	AV
10460	57.62	7.97	65.59	74	-8.41	V	PK
10460	41.94	7.97	49.91	54	-4.09	V	AV

Frequency	Reading	Correct	Result	Limit	Margin	Polar	Detector
(MHz)	(dBuV/m)	dB	(dBuV/m)	(dBuV/m)	(dB)	H/V	
Low Channel (5270MHz)							
10540	58.11	8.16	66.27	74	-7.73	H	PK
10540	40.21	8.16	48.37	54	-5.63	H	AV
10540	56.14	8.16	64.30	74	-9.70	V	PK
10540	38.82	8.16	46.98	54	-7.02	V	AV
High Channel (5310MHz)							
10620	57.17	8.57	65.74	74	-8.26	H	PK
10620	38.30	8.57	46.87	54	-7.13	H	AV
10620	55.85	8.57	64.42	74	-9.58	V	PK
10620	40.25	8.57	48.82	54	-5.18	V	AV

Frequency	Reading	Correct	Result	Limit	Margin	Polar	Detector
(MHz)	(dBuV/m)	dB	(dBuV/m)	(dBuV/m)	(dB)	H/V	
Low Channel (5510MHz)							
11020	57.42	9.16	66.58	74	-7.42	H	PK
11020	39.76	9.16	48.92	54	-5.08	H	AV
11020	57.95	9.16	67.11	74	-6.89	V	PK
11020	41.35	9.16	50.51	54	-3.49	V	AV
Middle Channel (5590MHz)							
11180	58.46	9.29	67.75	74	-6.25	H	PK
11180	38.86	9.29	48.15	54	-5.85	H	AV
11180	55.49	9.29	64.78	74	-9.22	V	PK
11180	39.71	9.29	49.00	54	-5.00	V	AV
High Channel (5670MHz)							
11340	56.82	9.43	66.25	74	-7.75	H	PK
11340	39.90	9.43	49.33	54	-4.67	H	AV
11340	57.29	9.43	66.72	74	-7.28	V	PK
11340	39.14	9.43	48.57	54	-5.43	V	AV

Frequency	Reading	Correct	Result	Limit	Margin	Polar	Detector
(MHz)	(dBuV/m)	dB	(dBuV/m)	(dBuV/m)	(dB)	H/V	
Low Channel (5755MHz)							
11510	58.27	9.45	67.72	74	-6.28	H	PK
11510	38.48	9.45	47.93	54	-6.07	H	AV
11510	55.94	9.45	65.39	74	-8.61	V	PK
11510	41.74	9.45	51.19	54	-2.81	V	AV
High Channel (5795MHz)							
11590	55.73	9.27	65.00	74	-9.00	H	PK
11590	41.48	9.27	50.75	54	-3.25	H	AV
11590	55.38	9.27	64.65	74	-9.35	V	PK
11590	40.49	9.27	49.76	54	-4.24	V	AV

➢ Out of Band edge for 5150-5250MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5150	-39.61	-27
Highest	Above 5350	-38.59	-27
Note: the data just list the worst cases			

➢ Out of Band edge for 5250-5350MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5150	-37.14	-27
Highest	Above 5350	-38.76	-27
Note: the data just list the worst cases			

➢ Out of Band edge for 5470-5725MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5470	-36.32	-27
Highest	Above 5725	-37.59	-27
Note: the data just list the worst cases			

➢ Out of Band edge for 5725-5850MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5650	-46.71	-27
	5650 to 5700	-33.29	-27 to -17
	5700 to 5720	-27.63	-17 to 15.6
	5720 to 5725	-17.52	15.6 to 27
Highest	5850 to 5855	-14.64	27 to 15.6
	5855 to 5875	-21.79	15.6 to -17
	5875 to 5925	-33.36	-17 to -27
	Above 5925	-38.71	-27
Note: the data just list the worst cases			

- For the frequency band 5.15-5.25GHz, 5.250-5.350GHz, 5.470-5.725GHz, 5.725-5.850GHz (802.11ac VH80)
- Harmonics And Spurious Emissions

Frequency (MHz)	Reading (dBuV/m)	Correct dB	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Polar H/V	Detector
5210MHz							
10420	56.15	7.53	63.68	74	-10.32	H	PK
10420	41.63	7.53	49.16	54	-4.84	H	AV
10420	57.21	7.53	64.74	74	-9.26	H	PK
10420	38.27	7.53	45.80	54	-8.20	H	AV

Frequency (MHz)	Reading (dBuV/m)	Correct dB	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Polar H/V	Detector
5290MHz							
10580	57.95	7.95	65.90	74	-8.10	H	PK
10580	41.52	7.95	49.47	54	-4.53	H	AV
10580	58.92	7.95	66.87	74	-7.13	V	PK
10580	40.53	7.95	48.48	54	-5.52	V	AV

Frequency (MHz)	Reading (dBuV/m)	Correct dB	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Polar H/V	Detector
Low Channel (5530MHz)							
11060	55.72	9.42	65.14	74	-8.86	H	PK
11060	39.07	9.42	48.49	54	-5.51	H	AV
11060	57.82	9.42	67.24	74	-6.76	V	PK
11060	41.67	9.42	51.09	54	-2.91	V	AV
High Channel (5610MHz)							
11220	58.14	9.69	67.83	74	-6.17	H	PK
11220	41.87	9.69	51.56	54	-2.44	H	AV
11220	55.02	9.69	64.71	74	-9.29	V	PK
11220	41.97	9.69	51.66	54	-2.34	V	AV

Frequency	Reading	Correct	Result	Limit	Margin	Polar	Detector
(MHz)	(dBuV/m)	dB	(dBuV/m)	(dBuV/m)	(dB)	H/V	
5775MHz							
11550	55.32	9.93	65.25	74	-8.75	H	PK
11550	39.56	9.93	49.49	54	-4.51	H	AV
11550	56.23	9.93	66.16	74	-7.84	V	PK
11550	39.54	9.93	49.47	54	-4.53	V	AV

- Out of Band edge for 5150-5250MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5150	-37.25	-27
Highest	Above 5350	-36.37	-27
Note: the data just list the worst cases			

- Out of Band edge for 5250-5350MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5150	-38.61	-27
Highest	Above 5350	-36.76	-27
Note: the data just list the worst cases			

- Out of Band edge for 5470-5725MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5470	-39.83	-27
Highest	Above 5725	-37.62	-27
Note: the data just list the worst cases			

➢ Out of Band edge for 5725-5850MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5650	-46.72	-27
	5650 to 5700	-33.59	-27 to -17
	5700 to 5720	-27.16	-17 to 15.6
	5720 to 5725	-17.74	15.6 to 27
Highest	5850 to 5855	-14.64	27 to 15.6
	5855 to 5875	-22.08	15.6 to -17
	5875 to 5925	-33.24	-17 to -27
	Above 5925	-38.64	-27
Note: the data just list the worst cases			

Note: Testing is carried out with frequency rang 9kHz to 40Ghz, other than listed in the table above are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

9. Frequency Stability

9.1 Standard Applicable

According to §15.407(g), manufacturers of U-NII devices are responsible for ensuring frequency stability such that an emission is maintained within the band of operation under all conditions of normal operation as specified in the users manual.

9.2 Test Procedure

According to §2.1055, the following test procedure was performed.
The Frequency Stability is measured directly with a Frequency Domain Analyzer. Frequency Deviation in ppm is calculated from the measured peak to peak value.
The Carrier Frequency Stability over Power Supply Voltage and over Temperature is measured with a Frequency Domain Analyzer in histogram mode.

9.3 Summary of Test Results/Plots

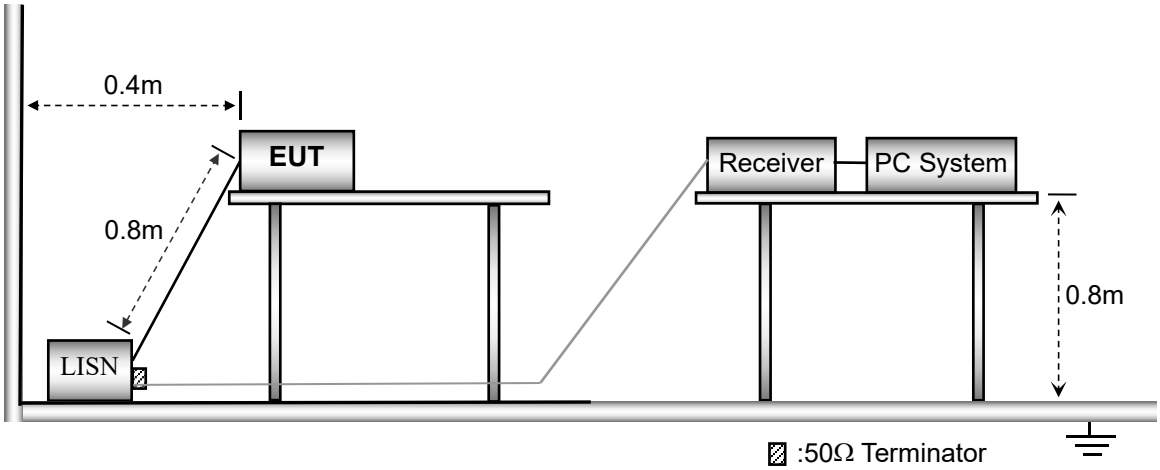
Please refer to Appendix D

10. Conducted Emissions

10.1 Test Procedure

The setup of EUT is according with per ANSI C63.10-2013 measurement procedure. The specification used was with the FCC Part 15.207 Limit.
The external I/O cables were draped along the test table and formed a bundle 30 to 40cm long in the middle. The spacing between the peripherals was 10cm.

10.2 Basic Test Setup Block Diagram



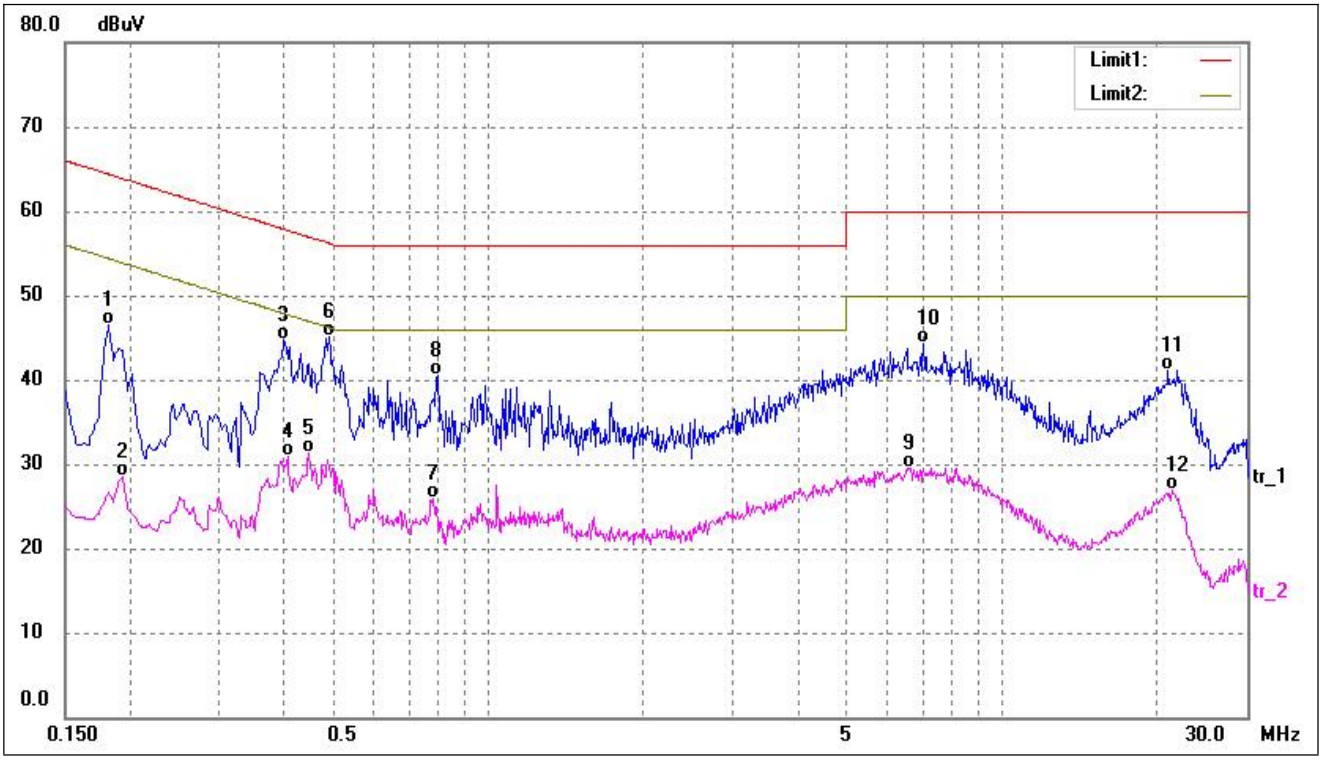
10.3 Test Receiver Setup

During the conducted emission test, the test receiver was set with the following configurations:

Start Frequency..... 150kHz
Stop Frequency..... 30MHz
Sweep Speed.....Auto
IF Bandwidth..... 10kHz
Quasi-Peak Adapter Bandwidth.....9kHz
Quasi-Peak Adapter Mode.....Normal

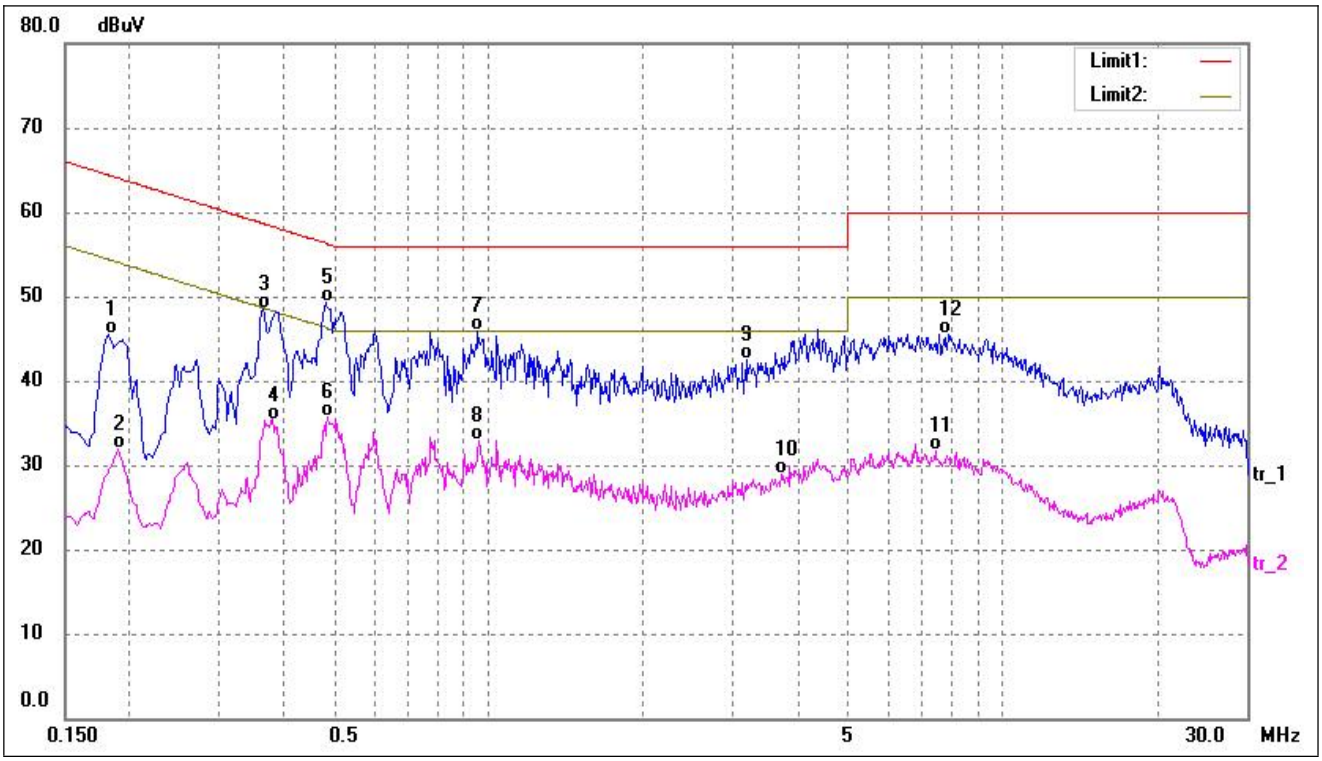
10.4 Summary of Test Results/Plots

Test Mode	Communication	AC120V 60Hz	Polarity:	Neutral



No.	Frequency	Reading	Correct	Result	Limit	Margin	Detector
	(MHz)	(dBuV)	(dB)	(dBuV)	(dBuV)	(dB)	
1	0.1819	36.84	9.64	46.48	64.39	-17.91	QP
2	0.1940	18.95	9.59	28.54	53.86	-25.32	AVG
3	0.3980	34.92	9.69	44.61	57.89	-13.28	QP
4	0.4060	21.26	9.69	30.95	47.73	-16.78	AVG
5	0.4460	21.61	9.71	31.32	46.95	-15.63	AVG
6*	0.4900	35.40	9.74	45.14	56.17	-11.03	QP
7	0.7820	16.17	9.69	25.86	46.00	-20.14	AVG
8	0.7980	30.89	9.69	40.58	56.00	-15.42	QP
9	6.5980	19.79	9.79	29.58	50.00	-20.42	AVG
10	7.0340	34.59	9.80	44.39	60.00	-15.61	QP
11	21.0900	30.98	10.21	41.19	60.00	-18.81	QP
12	21.3819	16.76	10.21	26.97	50.00	-23.03	AVG

Test Mode	Communication	AC120V 60Hz	Polarity:	Line



No.	Frequency	Reading	Correct	Result	Limit	Margin	Detector
	(MHz)	(dBuV)	(dB)	(dBuV)	(dBuV)	(dB)	
1	0.1819	35.96	9.64	45.60	64.39	-18.79	QP
2	0.1900	22.25	9.61	31.86	54.03	-22.17	AVG
3	0.3620	38.77	9.67	48.44	58.68	-10.24	QP
4	0.3780	25.72	9.68	35.40	48.32	-12.92	AVG
5*	0.4820	39.64	9.73	49.37	56.30	-6.93	QP
6	0.4860	25.91	9.73	35.64	46.24	-10.60	AVG
7	0.9540	36.22	9.68	45.90	56.00	-10.10	QP
8	0.9620	23.26	9.67	32.93	46.00	-13.07	AVG
9	3.1980	32.84	9.63	42.47	56.00	-13.53	QP
10	3.7300	19.33	9.66	28.99	46.00	-17.01	AVG
11	7.4460	21.91	9.81	31.72	50.00	-18.28	AVG
12	7.8860	35.69	9.83	45.52	60.00	-14.48	QP

APPENDIX SUMMARY

Project No.	WTF24X12289844W	Test Engineer	Timi Huang
Start date	2024/12/14	Finish date	2024/12/16
Temperature	24℃	Humidity	56%
RF specifications	U-NII		

APPENDIX	Description of Test Item	Result
A	Power Spectral Density	Compliant
B	Emission Bandwidth and Occupied Bandwidth	Compliant
C	Maximum Conducted Output Power	Compliant
D	Frequency Stability	Compliant

APPENDIX A

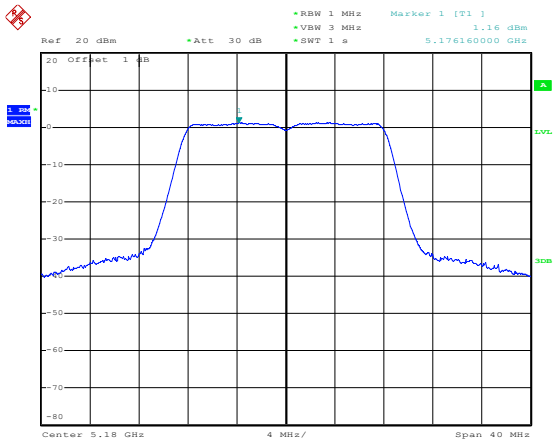
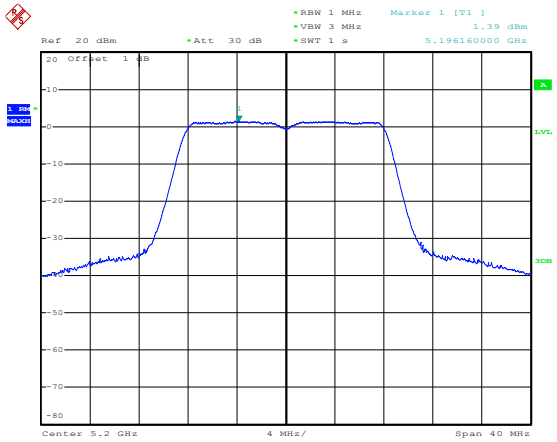
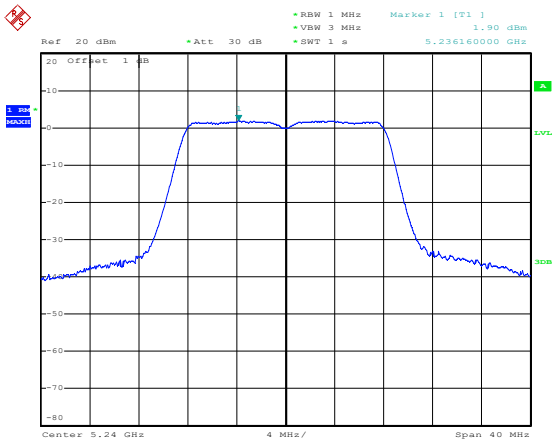
Power Spectral Density			
U-NII-1:5150-5250MHz			
Operating mode	Test Channel	Power Spectral Density dBm/MHz	Limit (dBm/MHz)
802.11a	5180	1.16	11
	5200	1.39	11
	5240	1.90	11
802.11n-HT20	5180	0.14	11
	5200	0.26	11
	5240	0.71	11
802.11n-HT40	5190	-4.20	11
	5230	-4.43	11
802.11ac-VHT20	5180	0.30	11
	5200	0.36	11
	5240	0.87	11
802.11ac-VHT40	5190	-4.68	11
	5230	-4.20	11
802.11ac-VHT80	5210	-8.83	11

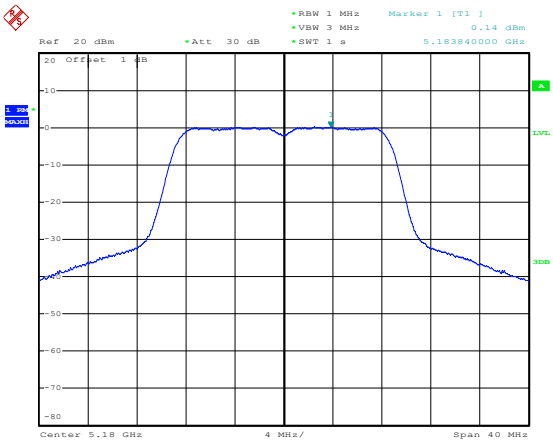
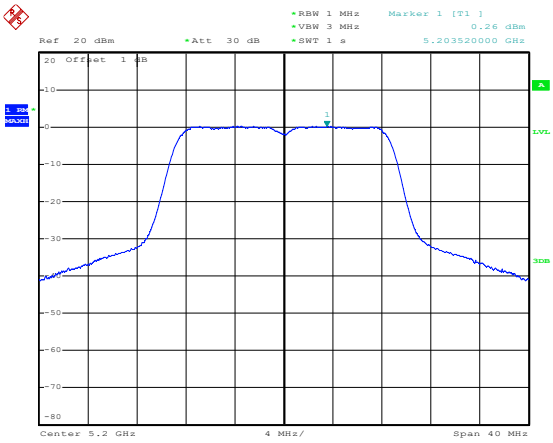
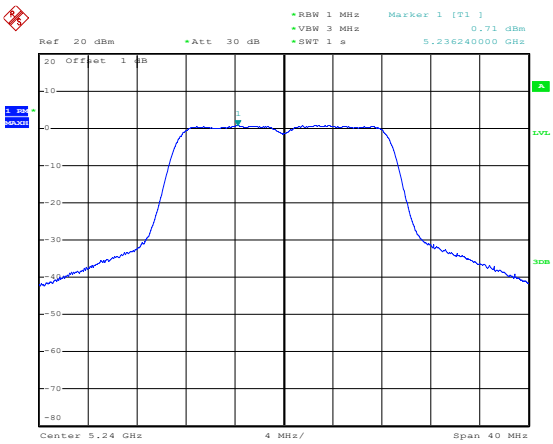
U-NII-2A: 5250-5350MHz			
Operating mode	Test Channel	Power Spectral Density dBm/MHz	Limit (dBm/MHz)
802.11a	5260	2.01	11
	5280	2.03	11
	5320	1.36	11
802.11n-HT20	5260	0.69	11
	5280	0.67	11
	5320	-0.11	11
802.11n-HT40	5270	-4.63	11
	5310	-5.37	11
802.11ac-VHT20	5260	0.77	11
	5280	0.88	11
	5320	0.04	11
802.11ac-VHT40	5270	-4.41	11
	5310	-4.85	11
802.11ac-VHT80	5290	-8.66	11

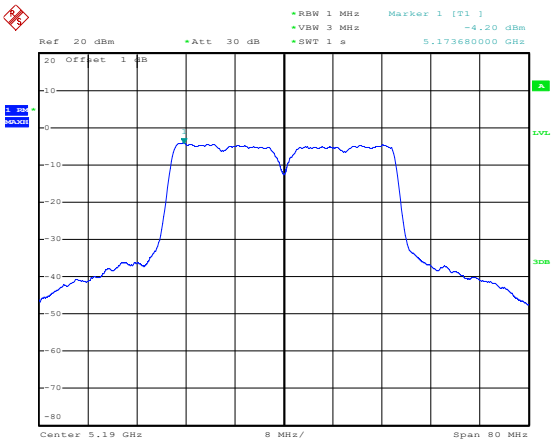
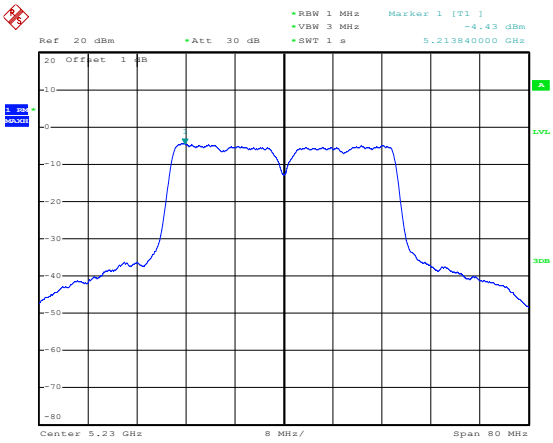
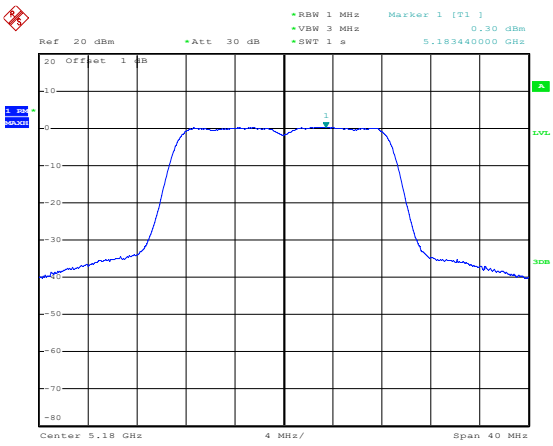
U-NII-2C: 5470-5725MHz			
Operating mode	Test Channel	Power Spectral Density dBm/MHz	Limit (dBm/MHz)
802.11a	5500	1.23	11
	5600	1.43	11
	5700	-0.02	11
802.11n-HT20	5500	0.17	11
	5600	0.41	11
	5700	-1.11	11
802.11n-HT40	5510	-4.08	11
	5590	-4.26	11
	5670	-5.30	11
802.11ac-VHT20	5500	0.26	11
	5600	0.57	11
	5700	-0.97	11
802.11ac-VHT40	5510	-3.88	11
	5590	-3.43	11
	5670	-5.44	11
802.11ac-VHT80	5530	-8.64	11
	5610	-8.05	11

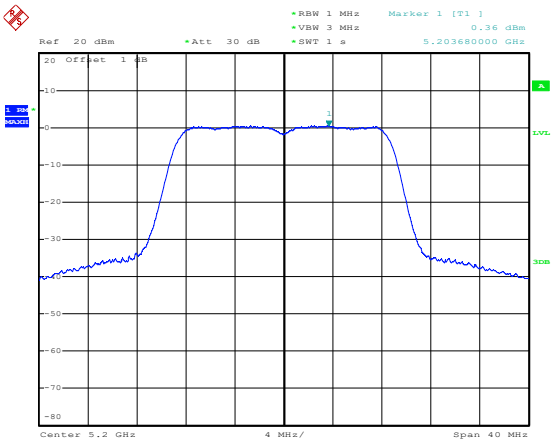
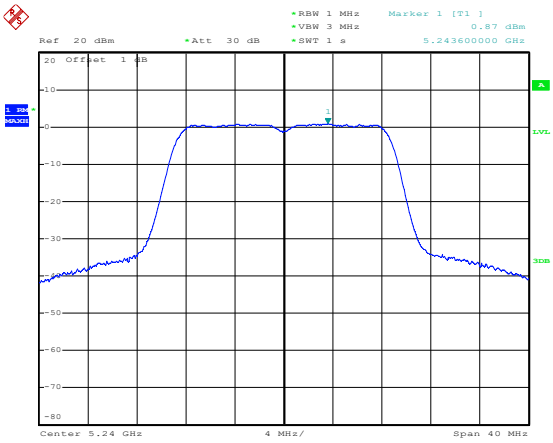
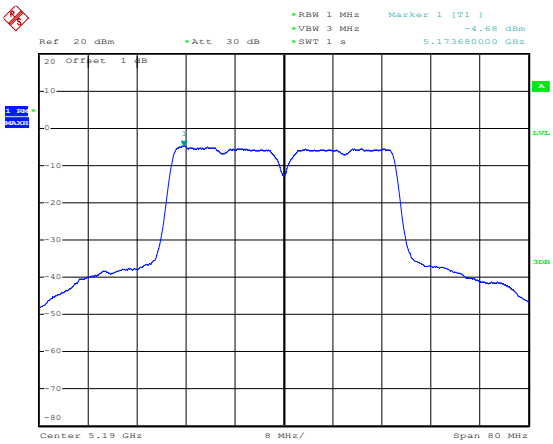
U-NII-3: 5725-5850MHz					
Operating mode	Test Channel	Power Spectral Density dBm/300kHz	Factor	Power Spectral Density* dBm/500kHz	Limit dBm/500kHz
802.11a	5745	-2.99	2.22	-0.77	30
	5785	-3.23	2.22	-1.01	30
	5825	-1.84	2.22	0.38	30
802.11n-HT20	5745	-3.60	2.22	-1.38	30
	5785	-3.68	2.22	-1.46	30
	5825	-2.64	2.22	-0.42	30
802.11n HT40	5755	-8.38	2.22	-6.16	30
	5795	-7.94	2.22	-5.72	30
802.11ac-VHT20	5745	-3.51	2.22	-1.29	30
	5785	-3.42	2.22	-1.2	30
	5825	-2.61	2.22	-0.39	30
802.11ac-VHT40	5755	-8.13	2.22	-5.91	30
	5795	-8.07	2.22	-5.85	30
802.11ac-VHT80	5775	-13.28	2.22	-11.06	30
*Note: Maximum PSD=PSD(dBm/300kHz)+10log(500kHz/300kHz)=2.22					

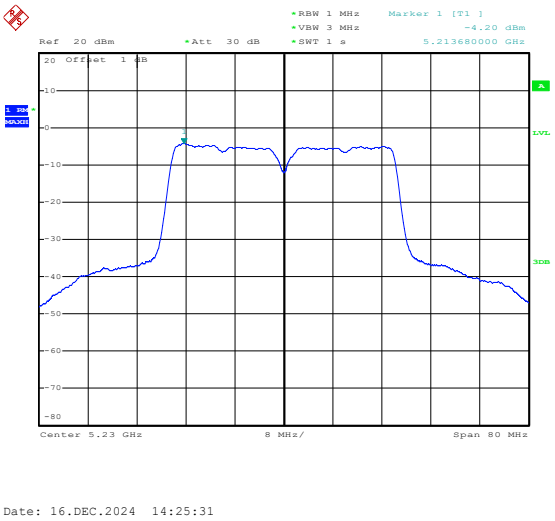
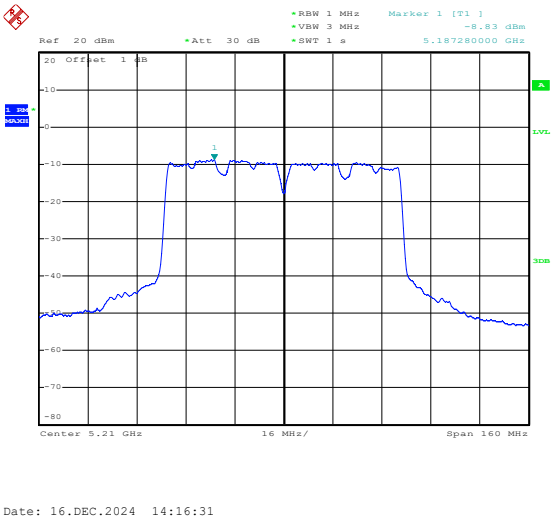
5150-5250MHz

802.11a-Low	 Date: 16.DEC.2024 14:36:29
802.11a-Middle	 Date: 16.DEC.2024 14:37:09
802.11a-High	 Date: 16.DEC.2024 14:37:24

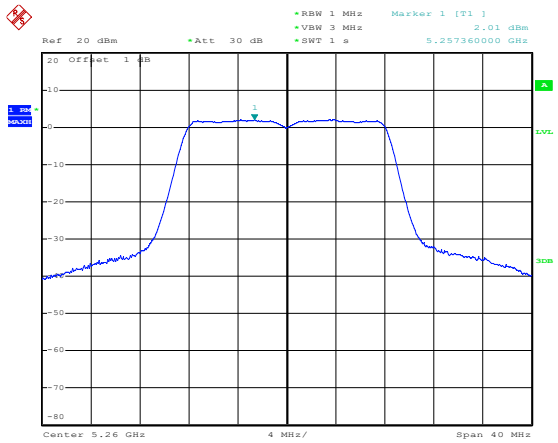
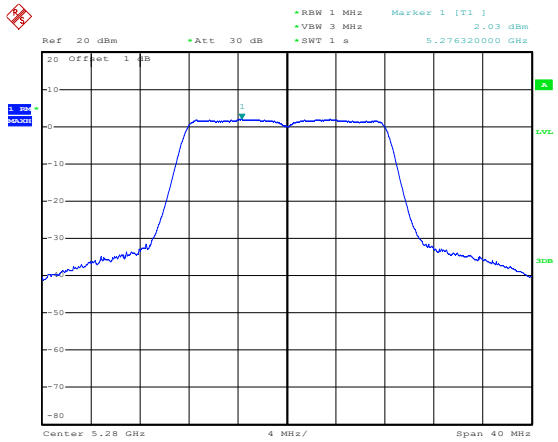
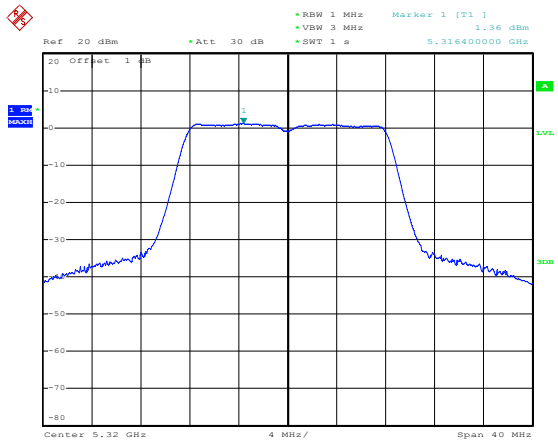
802.11n-HT20-Low	 Date: 16.DEC.2024 14:35:57
802.11n-HT20-Middle	 Date: 16.DEC.2024 14:35:39
802.11n-HT20-High	 Date: 16.DEC.2024 14:34:41

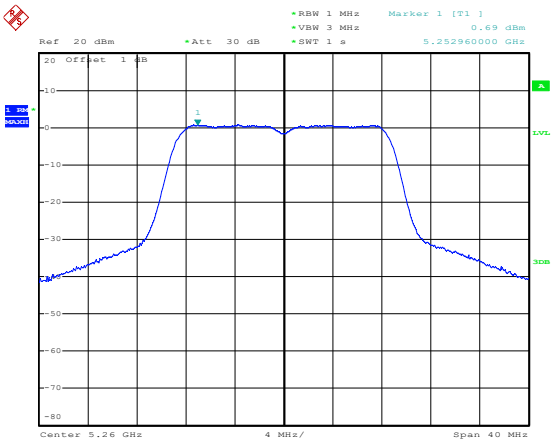
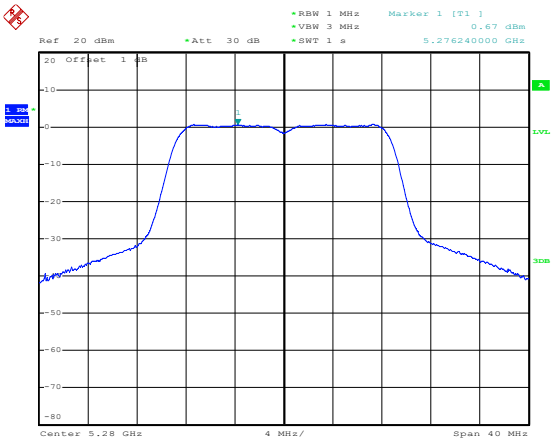
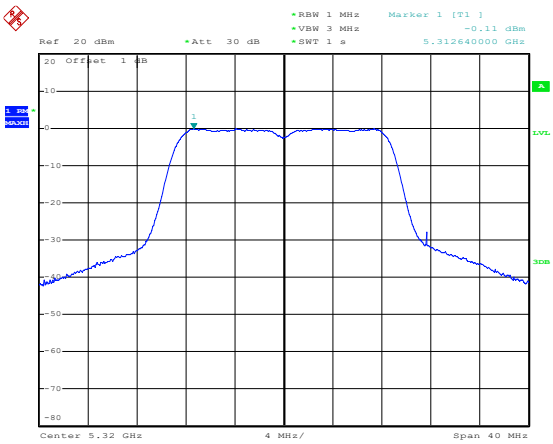
802.11n-HT40-Low	
802.11n-HT40-High	
802.11ac-VHT20-Low	

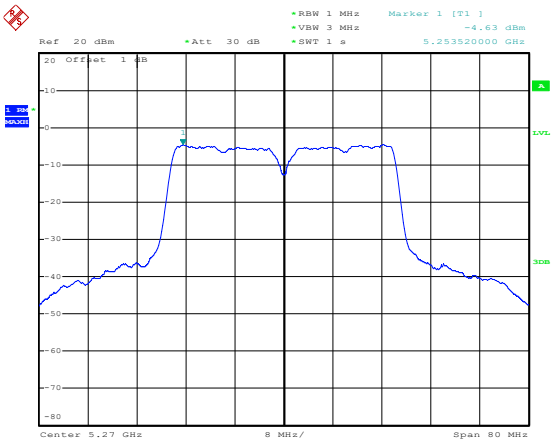
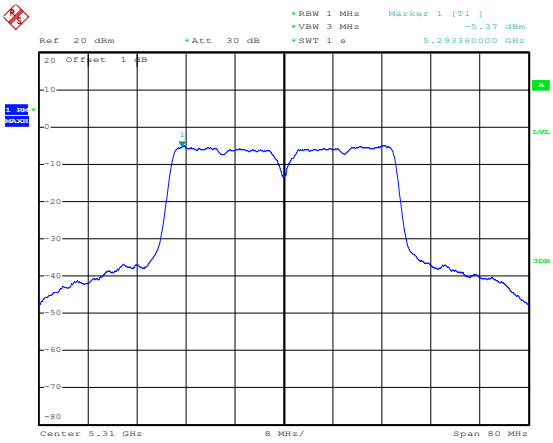
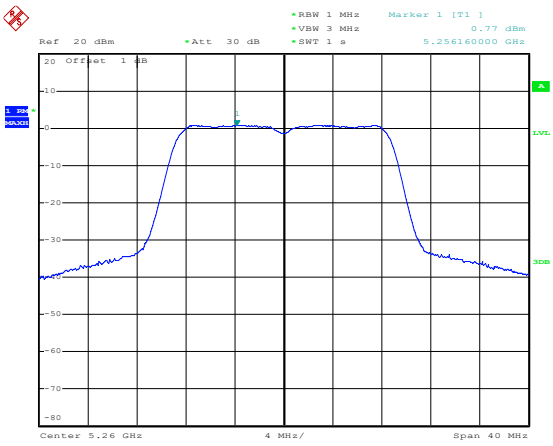
802.11ac-VHT20-Middle	 Date: 16.DEC.2024 14:32:47
802.11ac-VHT20-High	 Date: 16.DEC.2024 14:33:55
802.11ac-VHT40-Low	 Date: 16.DEC.2024 14:25:51

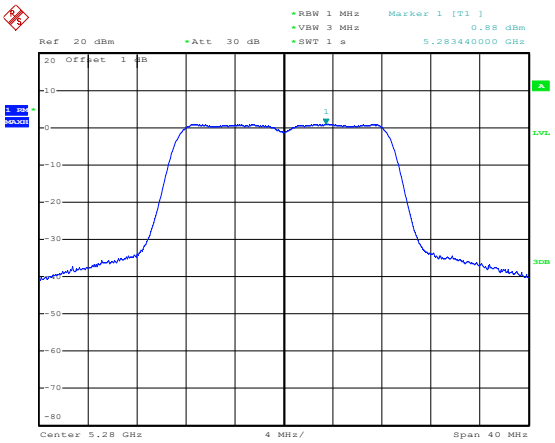
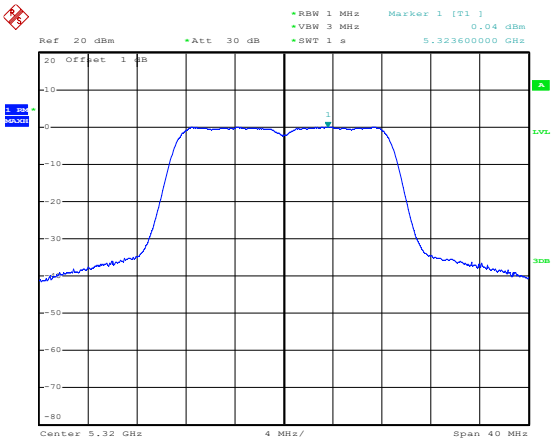
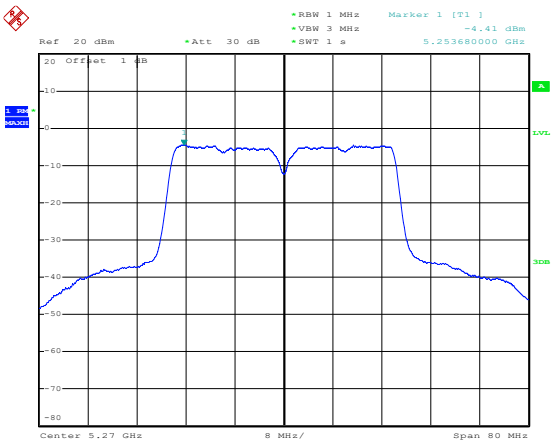
802.11ac-VHT40-High	
802.11ac-VHT80-Low	

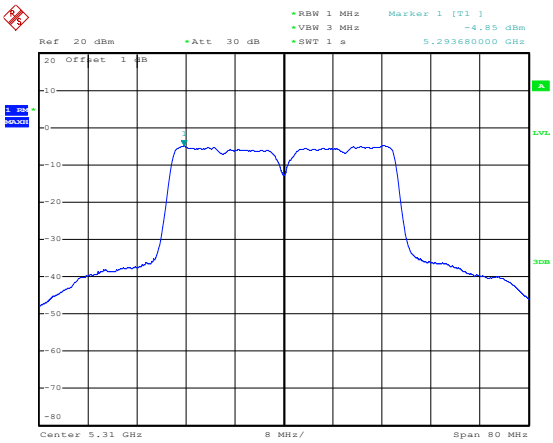
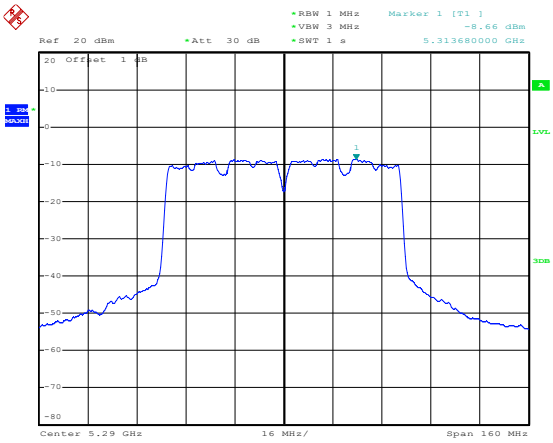
5250-5350MHz

802.11a-Low	 Date: 16.DEC.2024 16:15:04
802.11a-Middle	 Date: 16.DEC.2024 16:14:06
802.11a-High	 Date: 16.DEC.2024 16:13:29

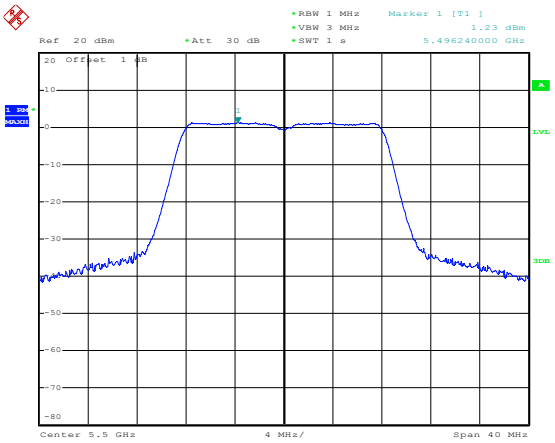
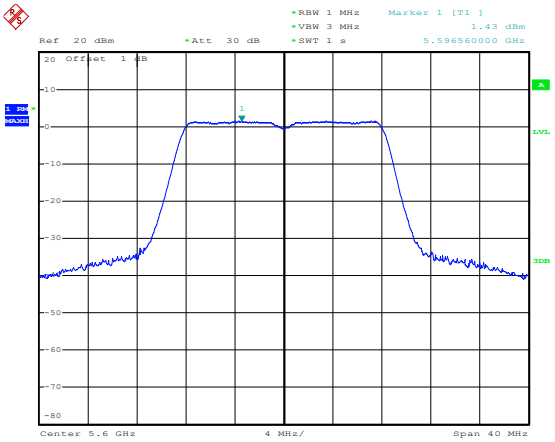
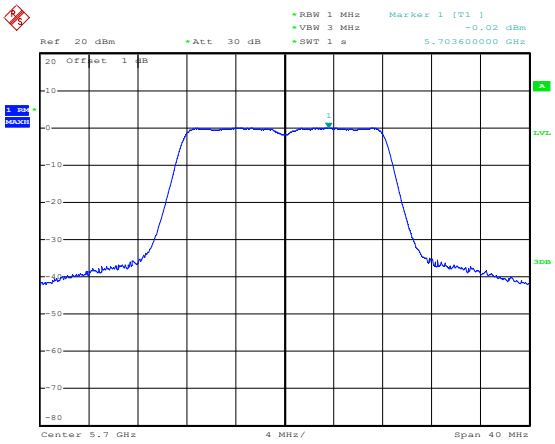
802.11n-HT20-Low	
802.11n-HT20-Middle	
802.11n-HT20-High	

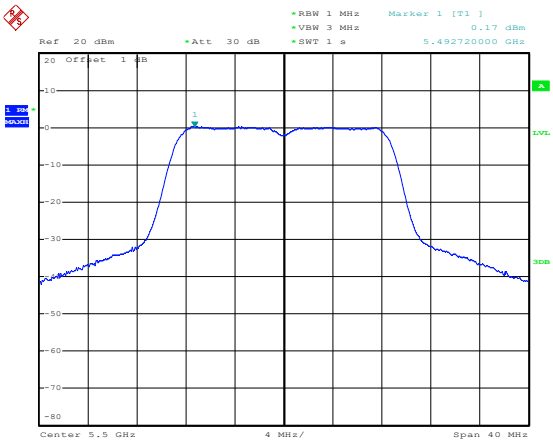
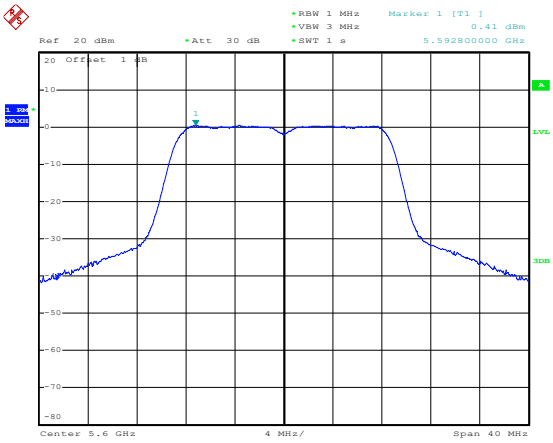
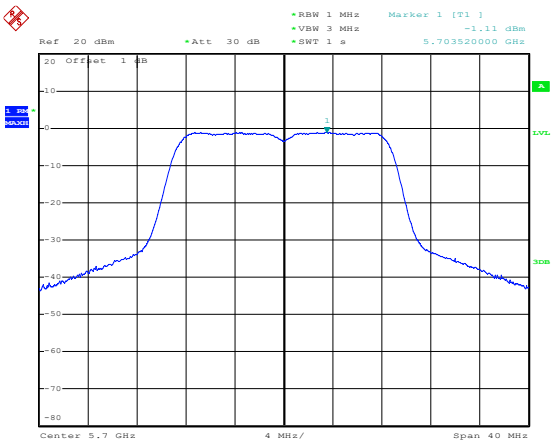
802.11n-HT40-Low	
802.11n-HT40-High	
802.11ac-VHT20-Low	

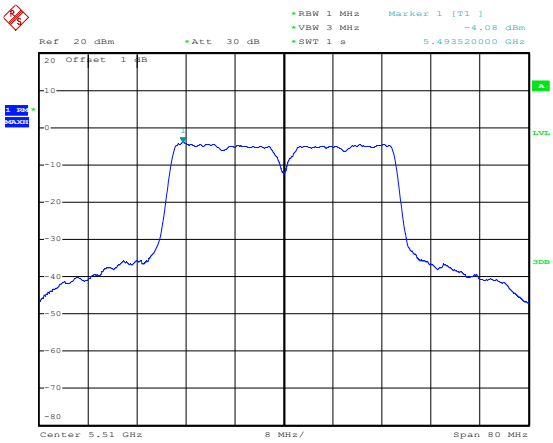
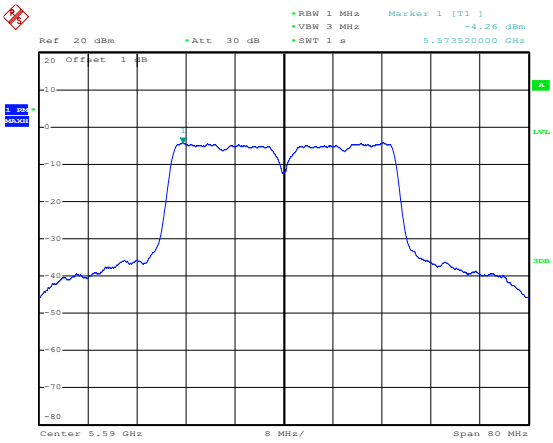
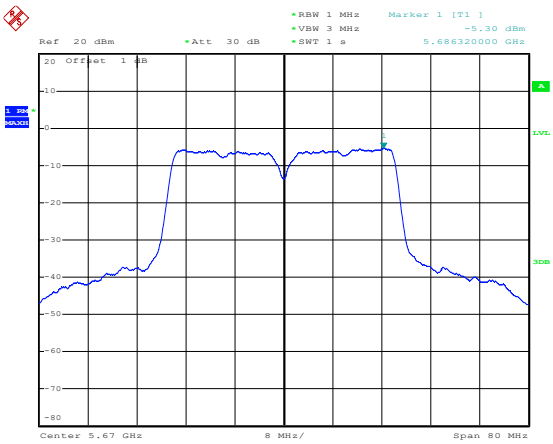
802.11ac-VHT20-Middle	 Date: 16.DEC.2024 16:07:56
802.11ac-VHT20-High	 Date: 16.DEC.2024 16:07:16
802.11ac-VHT40-Low	 Date: 16.DEC.2024 16:01:50

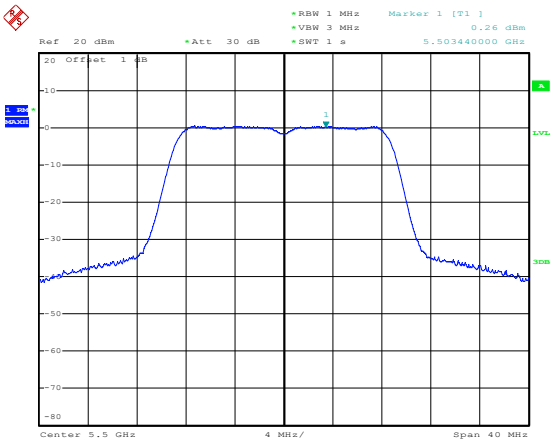
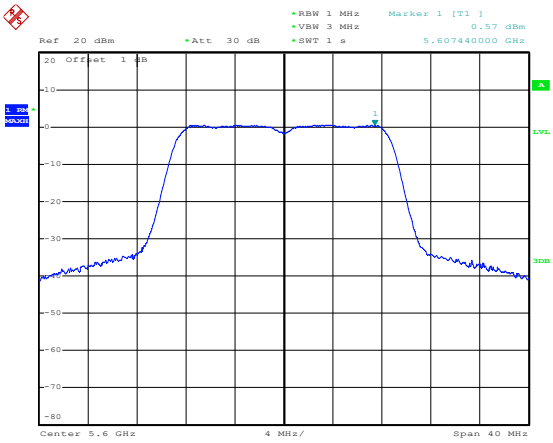
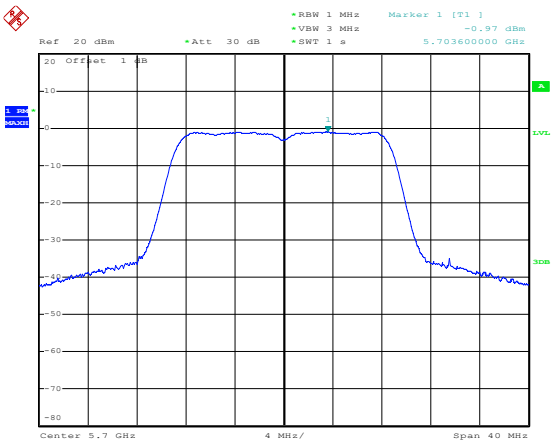
802.11ac-VHT40-High	
802.11ac-VHT80-Low	

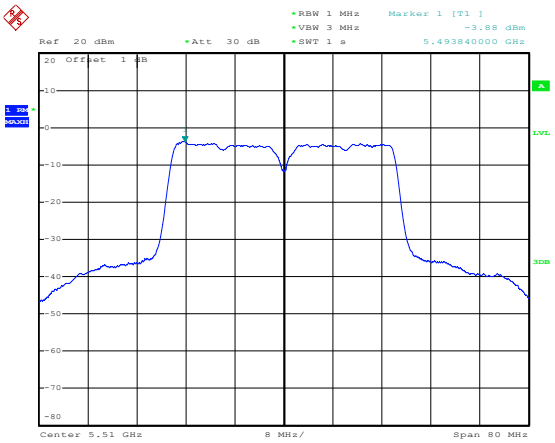
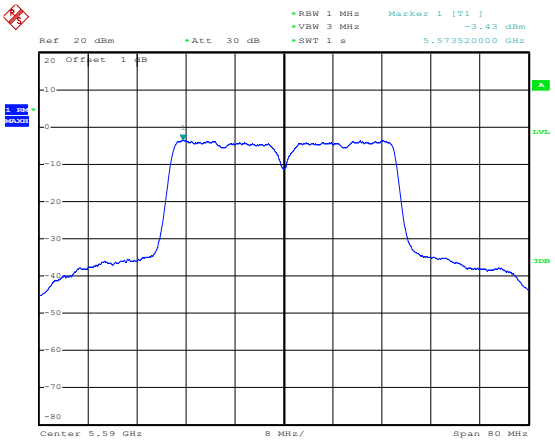
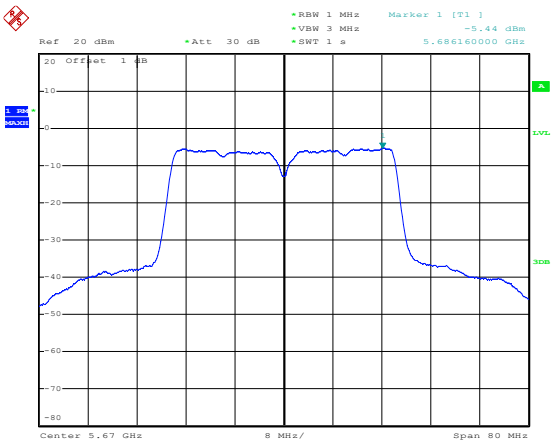
5470-5725MHz

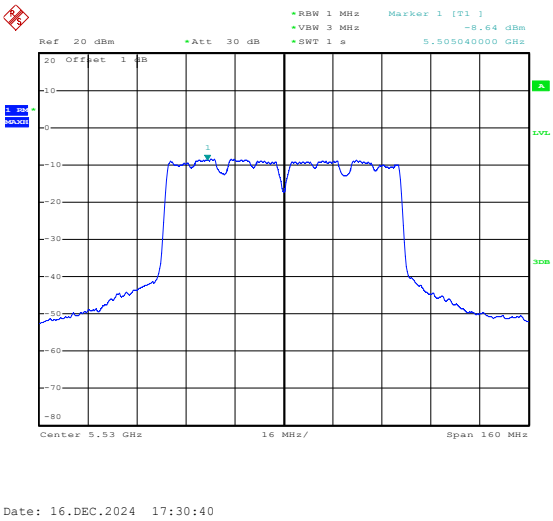
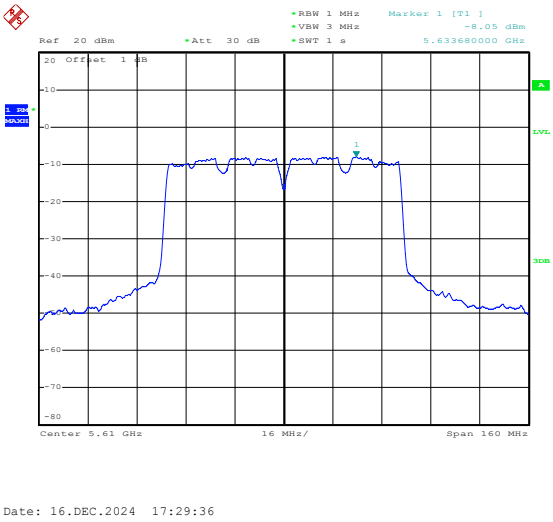
802.11a-Low	 Date: 16.DEC.2024 17:41:42
802.11a-Middle	 Date: 16.DEC.2024 17:41:08
802.11a-High	 Date: 16.DEC.2024 17:40:32

802.11n-HT20-Low	
802.11n-HT20-Middle	
802.11n-HT20-High	

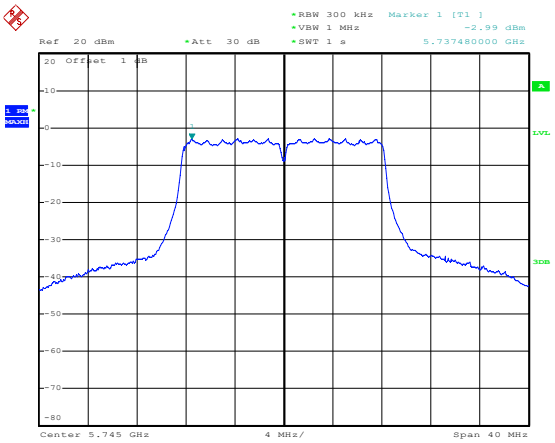
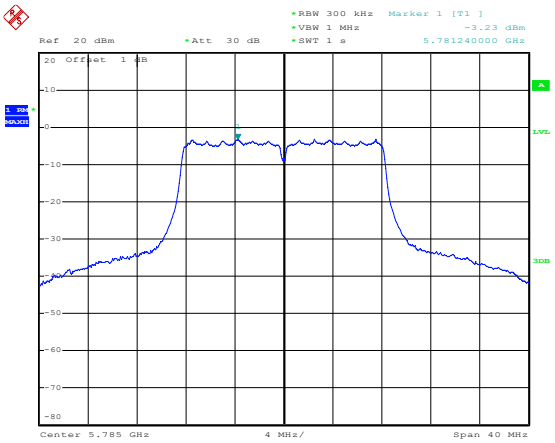
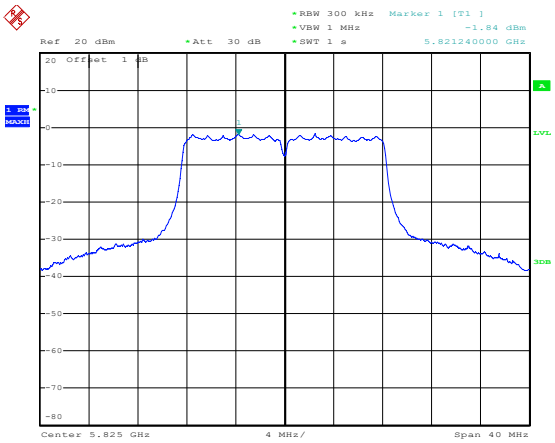
802.11n-HT40-Low	 Date: 16.DEC.2024 17:34:12
802.11n-HT40-Middle	 Date: 16.DEC.2024 17:34:47
802.11n-HT40-High	 Date: 16.DEC.2024 17:35:19

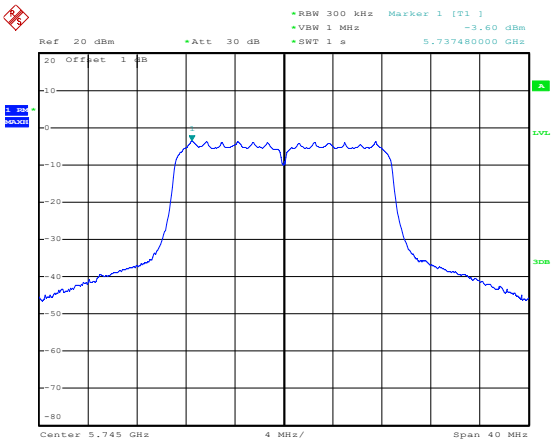
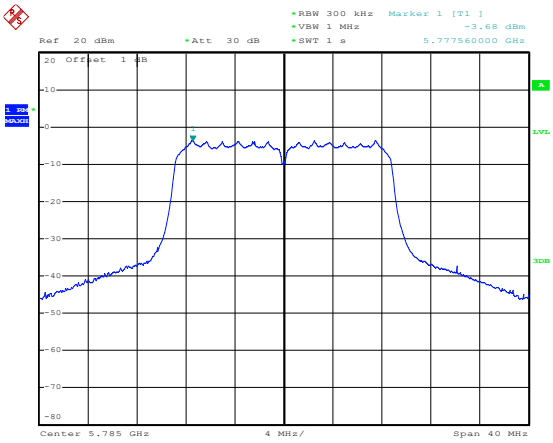
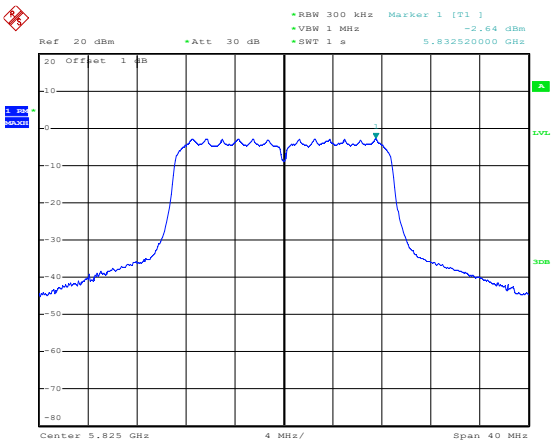
802.11ac-VHT20-Low	 Date: 16.DEC.2024 17:38:17
802.11ac-VHT20-Middle	 Date: 16.DEC.2024 17:37:46
802.11ac-VHT20-High	 Date: 16.DEC.2024 17:36:11

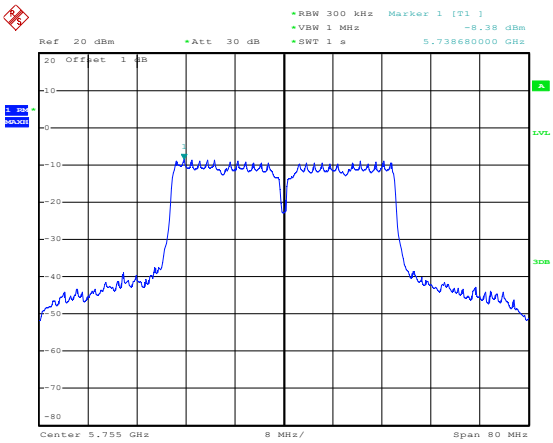
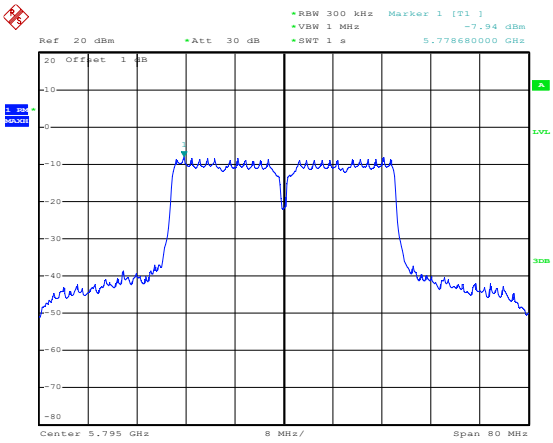
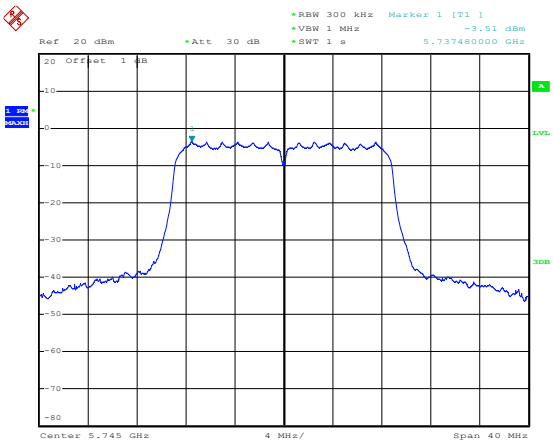
802.11ac-VHT40-Low	 Date: 16.DEC.2024 17:32:49
802.11ac-VHT40-Middle	 Date: 16.DEC.2024 17:32:10
802.11ac-VHT40-High	 Date: 16.DEC.2024 17:31:29

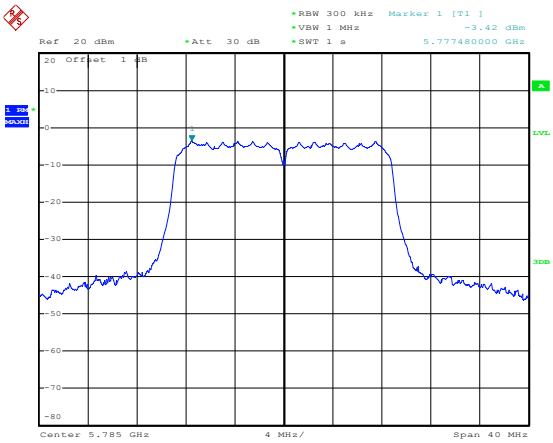
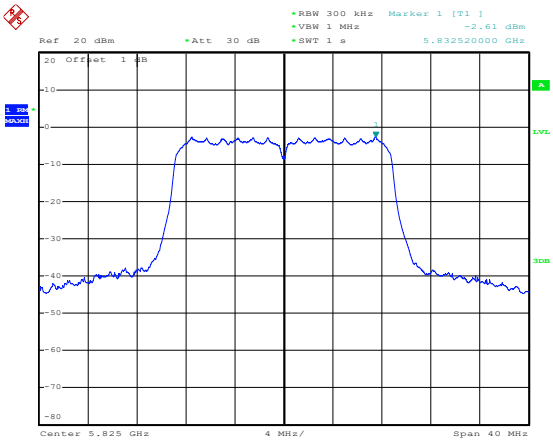
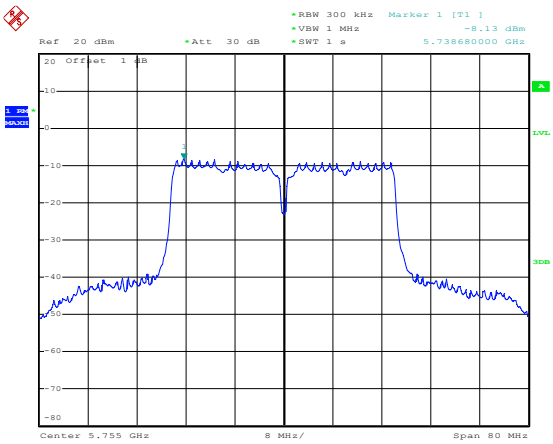
802.11ac-VHT80-Low	
802.11ac-VHT80- High	

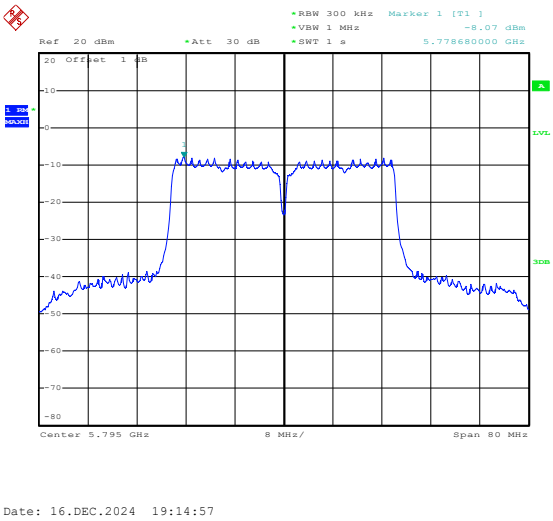
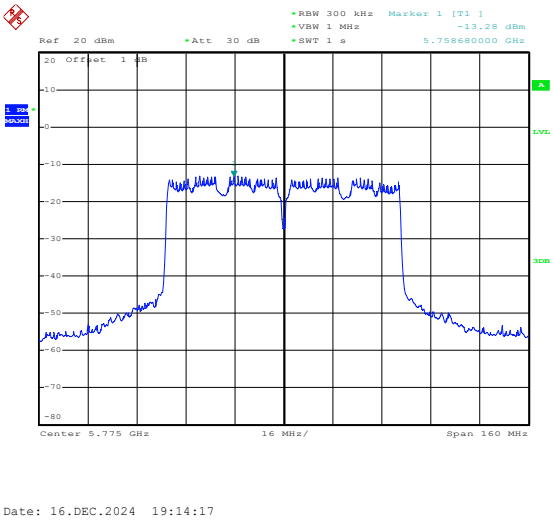
5725-5850MHz

802.11a-Low	
802.11a-Middle	
802.11a-High	

802.11n-HT20-Low	
802.11n-HT20-Middle	
802.11n-HT20-High	

802.11n-HT40-Low	
802.11n-HT40-High	
802.11ac-VHT20-Low	

802.11ac-VHT20-Middle	 Date: 16.DEC.2024 19:17:41
802.11ac-VHT20-High	 Date: 16.DEC.2024 19:17:07
802.11ac-VHT40-Low	 Date: 16.DEC.2024 19:15:28

802.11ac-VHT40-High	
802.11ac-VHT80-Low	

APPENDIX B

Emission Bandwidth and Occupied Bandwidth

U-NII-1:5150-5250MHz				
Test Mode	**Test Channel MHz**	**26 dB Bandwidth MHz**	**99% Bandwidth MHz**	**Limit MHz**
802.11a	5180	25.80	17.20	Pass
	5200	24.60	17.28	Pass
	5240	24.90	17.12	Pass
802.11n-HT20	5180	26.28	18.00	Pass
	5200	25.44	18.08	Pass
	5240	25.92	18.00	Pass
802.11n-HT40	5190	43.60	37.28	Pass
	5230	43.20	37.28	Pass
802.11ac-VHT20	5180	22.60	17.92	Pass
	5200	22.70	17.92	Pass
	5240	22.60	17.92	Pass
802.11ac-VHT40	5190	43.00	37.44	Pass
	5230	43.60	37.28	Pass
802.11ac-VHT80	5210	84.24	75.84	Pass

U-NII-2A: 5250-5350MHz				
Test Mode	**Test Channel MHz**	**26 dB Bandwidth MHz**	**99% Bandwidth MHz**	**Limit MHz**
802.11a	5260	23.80	17.12	Pass
	5280	23.80	17.20	Pass
	5320	24.50	17.20	Pass
802.11n-HT20	5260	26.28	18.08	Pass
	5280	26.64	18.08	Pass
	5320	27.12	18.08	Pass
802.11n-HT40	5270	42.80	37.60	Pass
	5310	41.60	37.44	Pass
802.11ac-VHT20	5260	22.40	18.08	Pass
	5280	24.60	18.00	Pass
	5320	25.00	18.00	Pass
802.11ac-VHT40	5270	45.40	37.28	Pass
	5310	42.80	37.44	Pass
802.11ac-VHT80	5290	86.40	75.84	Pass

U-NII-2C: 5470-5725MHz				
Test Mode	**Test Channel MHz**	**26 dB Bandwidth MHz**	**99% Bandwidth MHz**	**Limit MHz**
802.11a	5500	24.80	17.36	Pass
	5600	24.30	17.28	Pass
	5700	23.00	17.12	Pass
802.11n-HT20	5500	26.76	18.08	Pass
	5600	26.76	18.08	Pass
	5700	26.64	18.08	Pass
802.11n-HT40	5510	42.20	37.60	Pass
	5590	44.00	37.60	Pass
	5670	43.40	37.76	Pass
802.11ac-VHT20	5500	23.30	18.08	Pass
	5600	21.80	18.08	Pass
	5700	23.70	18.00	Pass
802.11ac-VHT40	5510	41.00	37.28	Pass
	5590	42.80	37.28	Pass
	5670	42.60	37.28	Pass
802.11ac-VHT80	5530	86.04	75.52	Pass
	5610	85.32	75.84	Pass

U-NII-3: 5725-5850MHz				
Test Mode	**Test Channel MHz**	**6 dB Bandwidth MHz**	**99% Bandwidth MHz**	**Limit MHz**
802.11a	5745	16.48	17.36	≥500
	5785	16.56	17.28	≥500
	5825	16.56	17.36	≥500
802.11n-HT20	5745	17.68	18.16	≥500
	5785	17.68	18.08	≥500
	5825	17.68	18.08	≥500
802.11n-HT40	5755	36.32	37.44	≥500
	5795	36.32	37.44	≥500
802.11ac-VHT20	5745	17.68	18.00	≥500
	5785	17.68	18.00	≥500
	5825	17.68	17.92	≥500
802.11ac-VHT40	5755	36.48	37.28	≥500
	5795	36.64	37.44	≥500
802.11ac-VHT80	5775	76.48	76.16	≥500